



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



STEVEN E. CHESTER  
DIRECTOR

May 30, 2007

Mr. Jack Dillon  
Lenawee County Drain Commissioner's Office  
Sewer & Water Superintendent  
320 Springbrook Avenue, Suite 102  
Adrian, Michigan 49221

Dear Mr. Dillon:

The Department of Environmental Quality, Water Bureau, Drinking Water and Environmental Health Section, On-Site Wastewater Unit, review of the May 24, 2007, final Rollin and Woodstock Septage Receiving Facility operating plan is complete. The plan meets the requirements outlined in Section 11715b of Part 117, Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Therefore, the operating plan is **approved**.

The receiving facility must operate in accordance with the approved plan. If a change in operations or conditions is anticipated, please file an amendment to the plan at least thirty (30) days prior to the proposed date for implementation.

Thank you for your continued environmental stewardship and service to those with on-site septic systems in and around your community. If you have any questions regarding this matter, please contact me.

Sincerely,

Brett A. Wiseley  
On-Site Wastewater Unit  
Drinking Water and Environmental Health Section  
Lansing Operations Division  
Water Bureau  
517-241-1452

BAW:CKP

cc: Lenawee County Health Department  
Mr. Jon Russell, DEQ



## DEQ Septage Receiving Facility Checklist

Name of Septage Receiving Facility:  
**Rollin & Woodstock WWTP**

Page 1

DEQ Reviewer: BAW  
Review Date: May 25, 2007

Address of Septage Receiving Facility:  
**6100 Sorby Road**  
**Addison, Michigan 49220**

Facility Contact: Jack Dillon, Len Co.  
Telephone Number: 517-264-4696

The following information must be submitted in the Operation Plan  
in order to receive DEQ approval:

<u>Requirement</u>	<u>Yes</u>	<u>No</u>	<u>Comments</u>
1. Location of septage RF.	X		
2. Hours of operation.	X		<b>M-F 7-4, NO HOLIDAYS</b>
3. Categories of septage waste the RF will receive.	X		
4. If food establishment septage is accepted, how is the RF ensuring that the FES meets the 1:3 ratio mandated by law? (Not OP req't.)			<b>NOT ACCEPTING</b>
5. *Fee structure charged to hauler.	X		
6. *Service area (septage acceptance) description of RF defined in detail.	X		<b>VOLUNTARY, NO RADIUS REQUIREMENT</b>
7. Notice of proposed operation plan: a) Was it mailed to county HD and legislative body of each city, village and township located in whole or in part of the service area?	X		

Septage Receiving Facility Checklist  
Name of Septage Receiving Facility:

Page 2

<u>Requirement</u>	<u>Yes</u>	<u>No</u>	<u>Comments</u>
7. Notice of proposed op. plan, continued: b) Was it public noticed in the local newspaper?	X		
c) Was it posted on the facility website?	X		N/A
8. Did the notice contain the following? a. Statement that the RF proposed to or is currently receiving and will continue to receive septage waste for treatment.	X		
b. Statement in the notice that the proposed operating plan is available for review during normal work hours.	X		
c. A request for written comments on the proposed operation of the RF and the deadline for receipt of such comments, which shall not be less than 30 days after publication, posting, or mailing of the notice.	X		
d. Receiving facility capacity. I) Hydraulic capacity:	X		
II) Organic capacity:	X		
*III) Wet weather operation considerations (CSO & SSO)			N/A DIRECT TO WWTP SLUDGE HANDLING
9. Other conditions established for the RF.	X		

\*5. Fee structure - must be justified and reasonable in accordance with standard accounting practices.

\*6. This should be both written and illustrated on a map of the area. The service area information  
should include whether or not there is a county ordinance that also defines what they can or can't

accept. It should also include whether or not they accept septage pumped outside of the service area.  
\*8.d.(III). CSO-Combined Sewer Overflow and SSO-Sanitary Sewer Overflow.

## I. EXECUTIVE SUMMARY

### A. SUMMARY

The Project Plan for the Lenawee County Septage Receiving Facility has been prepared for the Lenawee County Drain Commissioner. The report focuses on evaluating septage receiving facilities for the Central Lenawee Wastewater Treatment (WWTP) and the Rollin-Woodstock WWTP. The report identifies the basis of design for the septage receiving facility and needed plant upgrades and expansion to accommodate future septage volumes and loadings. Currently, there are no septage receiving facilities in Lenawee County.

The need for the project has resulted from the following:

1. The mandated requirements in the amended Part 117, 1994 Public Act (PA) 451 - On October 12, 2004, the State of Michigan amended Part 117, Septage Waste Servicers of the Natural Resources and Environmental Protection Act. Part 117 regulates the pumping, disposal, and land application of septage waste. A copy of Act No. 381, which included the amendments to Part 117, is included in *Appendix E*.
2. Lack of septage receiving and treatment facilities within Lenawee County. A copy of the MDEQ's Statewide Accepting Septage Waste and Land Site Disposal Locations is included in *Appendix E*. Based on the locations shown, the nearest septage receiving stations are located in Jackson and Washtenaw Counties.
3. Also, in a letter to Septage Receiving Facility Operators dated June 9, 2005, the MDEQ states that "*The amendments to the Septage Waste Servicers law and continued growth in the total number of on-site wastewater treatment systems are expected to increase the need for septage receiving facilities.*" A copy of the letter is included in *Appendix E*.

### B. CONCLUSIONS

Optimizing the plants operation was explored. However, based on the capacity evaluation of the Rollin-Woodstock WWTP, it was determined that it can accept up to approximately 6,000 gallons per day (gpd). It was also determined that the Central-Lenawee WWTP does not have capacity to accept septage. The capacity analysis took into consideration the allocated capacity for the 20-year projected growth. The treatment capacity at both plants does not meet the septage projected loadings resulting from average and maximum month volumes of 13,500 gpd and 18,000 gpd, respectively.

The following alternatives were evaluated and the estimated project costs, annual debt service and user fee are summarized in *Table I.1*:

- **Alternative 1A (One Screen; No Grit Removal)** - Construction of one septage receiving station (with one screen and no grit removal) each at the Rollin-Woodstock and Central Lenawee WWTPs (total of two facilities), along with needed plant upgrades and/or expansion. The estimated capital costs of this alternative are \$5,438,400, including \$3,352,800 at the Central Lenawee WWTP and \$2,085,600 at the Rollin-Woodstock WWTP. The 20-year life-cycle costs (present worth) of this alternative is \$6,248,500.
- **Alternative 1B (One Screen with Grit Removal)** - Construction of one septage receiving station (with one screen and grit removal) each at the Rollin-Woodstock and Central Lenawee WWTPs (total of two facilities), along with needed plant upgrades and/or expansion. The estimated capital costs of this alternative are \$6,083,000, including \$3,675,100 at the Central Lenawee WWTP and \$2,407,900 at the Rollin-Woodstock WWTP. The 20-year life-cycle costs (present worth) of this alternative is \$6,881,900.
- **Alternative 2 (One Screen; One Future; No Grit Removal)** - Construction of one septage receiving station (with one screen and provisions for a future screen) each at the Rollin-Woodstock and Central Lenawee WWTPs (total of two facilities), along with needed plant upgrades and/or expansion. The estimated capital costs of this alternative are \$5,975,200, including \$3,621,200 at the Central Lenawee WWTP and \$2,354,000 at the Rollin-Woodstock WWTP. The 20-year life-cycle costs (present worth) of this alternative is \$6,792,700.
- **Alternative 3 (Two Screens; No Grit Removal)** - Construction of one septage receiving station (with two screens and no grit removal) each at the Rollin-Woodstock and Central Lenawee WWTPs (total of two facilities), along with needed plant upgrades and/or expansion. The estimated capital costs of this alternative are \$6,811,200, including \$4,039,200 at the Central Lenawee WWTP and \$2,772,000 at the Rollin-Woodstock WWTP. The 20-year life-cycle costs (present worth) of this alternative is \$7,637,400.

### C. **SELECTED ALTERNATIVE**

Based on the monetary evaluation and technical considerations, presented in *Section III*, the selected alternative is: Alternative 1B - construction of one septage receiving station (with one screen and grit removal) to accept "domestic septage only" at the Rollin-Woodstock WWTP, along with needed plant upgrades for aerobic co-digestion of screened septage and thickened waste activated sludge (WAS).

- **Alternative 1B (One Screen with Grit Removal) at Rollin-Woodstock WWTP**- Construction of one septage receiving station (with one screen and

grit removal) at the Rollin-Woodstock WWTP, along with needed plant upgrades. The estimated capital costs of this alternative are \$2,407,900. The alternative with grit removal was selected because removal of grit before the storage and aerobic digesters will minimize maintenance to the transfer and recirculation pumps and eliminate frequent cleaning of the storage and digester tanks.

- **Rollin-Woodstock WWTP Upgrades** – The potential sludge handling facility upgrades involve adding one aerobic digester, which would serve as the primary digester, and utilize one of the existing sludge holding tanks as the secondary digester. Both tanks would be covered and odor control would be provided. A preliminary estimate of the new tank capacity was determined to be about 193,000 gallons, with the assumption that the capacity of one of the existing tank of 238,000 gallons can be used. The sizing of the tank was based on a solids retention time (SRT) of 20 days and accepting the average septage volume of 13,500 gpd. Decant would be sent to the plant headworks, as needed to accept daily septage volumes. Aeration in the new tank would be provided utilizing coarse bubble diffuser system and existing blower capacity. The existing tank would be retrofitted with coarse bubble diffusion system. Pumps would be required for sludge transfer and recirculation. The process piping would be configured to allow for treating septage only and/or for mixing and treating septage with the waste activated sludge (WAS) currently produced at the plant.
- **Septage Pilot Program** - Prior to proceeding with the plants' upgrades, a full-scale pilot program is recommended to be implemented at the Rollin-Woodstock WWTP, using two of the existing unused aerobic digesters (with the 103,000 capacity). The goal of the pilot program is three fold: 1) it would provide data on the septage characteristics that can be used for properly sizing the plant upgrades; 2) it provides some basis for an optimum operational mode; and, 3) it can provide for an interim alternative of accepting septage until the permanent facilities are built. This is based on the determination that the plant has the capacity to accept up to 6,000 gpd of septage. The pilot study would involve accepting, sampling and treating septage at the plant. An operational protocol must be carefully prepared and approval must be obtained from the MDEQ for the pilot study. The pilot study duration should be for a minimum of 90 days.

The user cost of implementing the project at the Rollin-Woodstock WWTP at an estimated cost of \$2,407,900 would be \$117 per 1,000 gallons of septage disposed at the facility (assuming 1.75 MG average annual septage volumes and 20-year at 1.625% interest loan term), including \$81.00 for debt retirement and \$36 per \$1,000 gallon for operation and maintenance costs.

Facility	Alternative	Alternative	Alternative	Alternative
	1A	1B	2	3
<i>Central Lenawee WWTP (One Septage Facility)</i>				
Septage Facility	\$1,173,700	\$1,496,000	\$1,442,100	\$1,860,100
Plant Upgrades	\$2,179,100	\$2,179,100	\$2,179,100	\$2,179,100
<b>Project Costs</b>	<b>\$3,352,800</b>	<b>\$3,675,100</b>	<b>\$3,621,200</b>	<b>\$4,039,200</b>
<b>Annual Debt Service</b>	<b>\$197,700</b>	<b>\$216,700</b>	<b>\$213,500</b>	<b>\$238,200</b>
<b>User Fee</b>	<b>\$149</b>	<b>\$160</b>	<b>\$158</b>	<b>\$172</b>
<i>Rollin-Woodstock WWTP (One Septage Facility)</i>				
Septage Facility	\$1,173,700	\$1,496,000	\$1,442,100	\$1,860,100
Plant Upgrades	\$911,900	\$911,900	\$911,900	\$911,900
<b>Project Costs</b>	<b>\$2,085,600</b>	<b>\$2,407,900</b>	<b>\$2,354,000</b>	<b>\$2,772,000</b>
<b>Annual Debt Service</b>	<b>\$123,000</b>	<b>\$142,000</b>	<b>\$138,800</b>	<b>\$163,500</b>
<b>User Fee</b>	<b>\$106</b>	<b>\$117</b>	<b>\$115</b>	<b>\$129</b>
<i>Central Lenawee and Rollin-Woodstock WWTPs (Two Septage Facilities)</i>				
<b>Project Costs</b>	<b>\$5,438,400</b>	<b>\$6,083,000</b>	<b>\$5,975,200</b>	<b>\$6,811,200</b>
<b>Annual Debt Service</b>	<b>\$320,700</b>	<b>\$358,700</b>	<b>\$352,400</b>	<b>\$401,700</b>
<b>User Fee</b>	<b>\$219</b>	<b>\$241</b>	<b>\$237</b>	<b>\$266</b>

<sup>1</sup>Assuming 1.75 MG of annual septage volume and 20-year at 1.625% loan term.

<sup>2</sup>User fee per 1,000 septage gallons disposed at the facility, including debt retirement and O&M costs of \$36 per 1,000 gallons.



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
JACKSON DISTRICT OFFICE



STEVEN E. CHESTER  
DIRECTOR

March 19, 2007

Mr. Jack R. Dillon, Sewer & Water Systems Superintendent  
Lenawee County Drain Commission  
320 Springbrook Avenue, Suite 102  
Adrian, Michigan 49221

Dear Mr. Dillon:

SUBJECT: National Pollutant Discharge Elimination System Permit No. MI0027669  
Designated Name: Rollin-Woodstock WWTP  
Septage Treatment

The Department of Environmental Quality (DEQ), Water Bureau (WB), received your letter dated March 2, 2007, regarding the status of the septage receiving station pilot program at the Rollin-Woodstock Wastewater Treatment Plant (WWTP). As noted in your letter, we granted approval for the WWTP to receive 6,000 gallons of septage per day for 60 days, then approved an increase to 8,000 gallons of septage per day for the remainder of the pilot program. You have requested to maintain the 8,000 gallon per day septage receiving at the WWTP until a permanent septage receiving station can be installed.

DEQ, WB staff has reviewed your request in conjunction with final effluent data provided on the facility's Discharge Monitoring Reports. There is currently no evidence that the septage receiving station has had a detrimental effect on the treatment process or effluent quality at the WWTP. You are approved to continue accepting septage at the previously approved rate while completing design of the permanent septage receiving station.

We received your application for a construction permit under Part 41, Sewerage Systems, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, on March 13, 2007, for installation of the proposed temporary septage receiving screening equipment. This application will be reviewed in the near future. We will contact you to request any additional information that is needed in order for us to complete that review. You may contact Ms. Tiffany Myers, Environmental Engineer, of our staff, at 517-780-7480 with any questions regarding the application.

The March 2, 2007, letter states that upon completing final design of the permanent septage receiving station, you will be requesting authorization for an increase in the volume of septage to 18,000 gallons per day. We will review the increased loading authorization request when that is submitted along with any associated analytical data. Please be aware that the reliability and redundancy requirements of the WWTP as outlined in the "Recommended Standards for Wastewater Facilities" and in the United States Environmental Protection Agency's "Design Criteria for Mechanical, Electric, and Fluid System and Component Reliability" must not be compromised as a result of the increased septage load. These items should be addressed in your request for the increased loading.

301 EAST LOUIS GLICK HIGHWAY • JACKSON, MICHIGAN 49201-1556  
[www.michigan.gov](http://www.michigan.gov) • (517) 780-7690

Mr. Jack R. Dillon, Sewer & Water Systems Superintendent  
Page 2  
March 19, 2007

Please contact me should you have any questions regarding this correspondence.

Sincerely,



Jennifer Krejcik  
Environmental Quality Analyst  
Water Bureau  
517-780-7933

JK/CH

cc: Mr. Stephen May, Drain Commissioner, Lenawee County Drain Commission  
Mr. Matthew Campbell, WB, DEQ-Lansing Office  
Ms. Tiffany Myers, WB, DEQ-Jackson District Office  
~~File: Rollin-Woodstock WWTP Correspondence, Lenawee County~~

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5

OPERATING PLAN TO RECEIVE SEPTAGE AT THE  
ROLLIN & WOODSTOCK WASTEWATER TREATMENT PLANT

- A - PUBLIC NOTICE
- B - OPERATING PLAN
- C - RECEIVING FACILITY PROTOCOL
- D - PLANT LOADING, CAPACITYS
- E - PLANT INFLUENT DATA
- F - FINAL EFFLUENT DATA
- G - SEPTAGE TESTING DATA
- H - SUPERNATANT TESTING DATA
- I - WASTE ACTIVATED SLUDGE DATA
- J - DIGESTER DATA, STORAGE DIGESTER DATA
- K - MAPS OF PLANT LOCATION
- L - PLANT FLOW DIAGRAM
- M- CHAIN OF CUSTODY

**RECEIVED**  
MICH DEPT OF ENVIRONMENTAL QUALITY

MAY 24 2007

Water Division  
Groundwater Section  
WELL CONSTRUCTION UNIT



**Department of Environmental Quality  
Water Bureau  
Septage Program  
Septage Receiving Facility Inspection**

*Completion of this form is voluntary*

## **RECEIVING STATION CHECKLIST**

RECEIVING FACILITY INFORMATION (PLEASE PRINT OR TYPE)		
NAME <b>Rollin-Woodstock WWTP</b>		RECEIVING FACILITY OWNER <b>Rollin-Woodstock Sanitary Drain Drainage Board</b>
ADDRESS <b>6100 Sorby Rd.</b>		MAINTAINER OF THE RECEIVING FACILITY <b>Same</b>
CITY <b>Addison</b>	STATE <b>MI</b>	ZIP <b>49220</b>
HOURS OF OPERATION <b>7:30 A.M. - 4:00 P.M. M-F</b>		
<b>PLEASE COMPLETE ALL OF THE FOLLOWING INFORMATION</b>		
1. Are individual septic firm accounts established and tracked?		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
2. Are individual septic firms tracked on a per discharge basis? <i>This would include the volume discharged on a per visit basis.</i>		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
3. Are firms and septic waste volumes tracked separately for all users disposing septic waste at this facility? <i>Please attach a copy of the list of septic haulers using the facility and the number of gallons of septic disposed at the plant per hauler.</i>		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
4. Are the volumes totaled for each firm on a daily, weekly, monthly and yearly basis?		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
5. How many gallons of septic waste are received annually at this facility? _____ gallons		
6. Does the design of the receiving facility readily accommodate the septic hauler? If not, please explain.  _____  _____  _____		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
7. Is the dump station ramp sloped resulting in the complete drainage of the septic waste vehicle?		
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A		
8. Is the dump station maintained on a regular schedule?		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
9. Is staffing adequate to maintain the receiving facility?		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
10. Is the receiving facility/dump station free of noxious odors?		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
11. Are odor control measures in place?		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
12. Describe how the screenings are managed and where they are disposed. <i>Screenings are washed and placed in a dumpster to go to landfill.</i>  _____  _____		
13. Can the receiving facility be gated and locked to limit access?		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
14. Are there any safety issues? If so, please describe.		
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A		

Name of Inspector:

Please send a copy after inspection is complete to:

Name of Health Dept.: \_\_\_\_\_

Department of Environmental Quality  
Water Bureau, Septage Program  
Constitution Hall, 2<sup>nd</sup> Floor, North  
P.O. Box 30273  
Lansing, MI 48909-7773

Date of Inspection:

No enforcement action is to be taken by the health department.

Septage Receiving Station Check List

1. Location if septage receiving facility.  
Rollin & Woodstock WWPT  
6100 Sorby Hwy  
Addison, Mi. 49220
2. Hours of operation.  
Monday – Friday  
7:30 am – 4:00 pm  
No Holidays
3. Categories of septage waste you receiving facility will accept.  
Domestic only  
no ( RV, commercial,  
Food Establishments  
Portable toilet waste, ect
4. Fee structure charged to haulers to Dispose of septage for treatment  
\$ 55.00 PER 1,000 gallons
5. Service Area of your septage receiving facility.  
Lenawee County and Hillsdale County
6. Other conditios for receiving septage.  
See Plan and Protocol

## PUBLIC NOTICE

### THE OPERATING PLAN FOR THE ROLLIN & WOODSTOCK WWTP

#### FOR RECEIVING DOMESTIC SEPTAGE

The State of Michigan has amended Part 117 of the Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994, P.A. 451, to require the development of an Operating Plan describing the receipt of septage wastes.

The Rollin & Woodstock Plant (R-W WWTP) has contracted with Hazen & Sawyer - Environmental Engineers to study the head works capacity. Because of the R-W WWTP minimal loadings, a study was approved by DEQ for the plant to receive 6,000 gallons per day of septage for 90 days. The study was completed in January of 2007, with little or no noticeable impact to plant discharge.

The R-W WWTP will continue to receive Septage during the interim period during the design phase of a permanent receiving station at a rate of 6,000 to 8,000 gallons per day and up to 18,000 gallons per day with MDEQ approval of submitted plan.

A new operating plan includes and describes: the location, hours of operation, limits to acceptance of domestic septage, fee structure, service area and other conditions applicable to the receipt and acceptance of domestic septage.

Copies of the operating plan will be available at the Lenawee County Drain Commissioner's Office at 320 Springbrook Ave. Suite 102 Adrian Michigan 49221, between the hours of 8:00 am and 4:30 pm; Monday through Friday. It will also be available on the Lenawee County Drain Commissioner's website at ([www.lenaweedrain.com](http://www.lenaweedrain.com)).

Written comments concerning this plan should be submitted by May 31, 2007 to the attention of

Jack Dillon  
Lenawee County Drain Commissioner's Office  
Sewer & Water Superintendent  
320 Springbrook Ave. Suite 102  
Adrian, MI 49221

For additional information, please call Jack Dillon or Stephen R. May at 517-264-4696.

Jack

LENAWEE COUNTY

Drain Commissioner's Office

Stephen R. May  
Commissioner

320 Springbrook Avenue, Suite 102 • Adrian, Michigan 49221  
Phone: 517-264-4696 • Fax: 517-264-4785  
[www.lenaweedrain.com](http://www.lenaweedrain.com)

Jennifer L. Escott  
Deputy

LETTER OF TRANSMITTAL

DATE: April 17, 2007

TO: Cheryl Procter - Legal Notices  
The Daily Telegram

FAX #: 265-3030

RE: Public Notice - Rollin-Woodstock WWTP

We are sending you the following:

Quantity	Description
1 page	Operating Plan for the Rollin & Woodstock WWTP for Receiving Domestic Septage

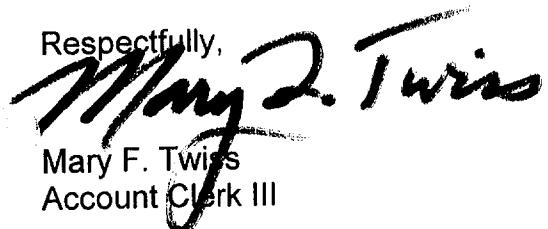
Transmitted for your:  use  
 review  
 approval       as requested  
information

Comments:

Please publish this notice one (1) time on Friday, April 20, 2007.  
ALSO, please call me at 264-4696 to confirm receipt of notice. Thank you.

If you have any questions, please give me a call.

Respectfully,



Mary F. Twiss  
Account Clerk III

mt

FAXED  
3:45 PM

## AFFIDAVITS OF PUBLICATION

<p>PUBLIC NOTICE THE OPERATING PLAN FOR THE ROLLIN &amp; WOODSTOCK WWTP FOR RECEIVING DOMESTIC SEPTAGE.</p> <p>The State of Michigan has amended part 17 of the Septage Waste Services, of the Natural Resources and Environmental Protection Act, 1994, P.A. 451, to require the development of an Operating Plan describing the receipt of septage wastes.</p> <p>The Rollin &amp; Woodstock Plant (R-W WWTP) has contracted with Hazen &amp; Sawyer's Environmental Engineers to study the head works capacity. Because of the R-W WWTP minimal loadings, a study was approved by DEQ for the plant to receive 6,000 gallons per day of septage for 90 days. The study was completed in January of 2007, with little or no noticeable impact to plant discharge.</p> <p>The R-W WWTP will continue to receive septage during the interim period during the design phase of a permanent receiving station at a rate of 6,000 to 8,000 gallons per day and up to 18,000 gallons per day with MDEQ approval of submitted plan.</p> <p>A new operating plan includes and describes the location, hours of operation, limits to acceptance of domestic septage, fee structure, service area and other conditions applicable to the receipt and acceptance of domestic septage.</p> <p>Copies of the operating plan will be available at the Lenawee County Drain Commissioner's Office at: 320 Springbrook Ave., Suite 102, Adrian, Michigan 49221 between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. It will also be available on the Lenawee County Drain Commissioner's website at (<a href="http://www.lenaweedrain.com">www.lenaweedrain.com</a>).</p> <p>Written comments concerning this plan should be submitted by May 31, 2007 to the attention of:</p> <p>Jack Dillon, Lenawee County Drain Commissioner's Office, Sewer &amp; Water Superintendent, 320 Springbrook Ave., Suite 102, Adrian, MI 49221.</p> <p>For additional information, please call Jack Dillon or Stephen H. May at 517-264-4696.</p> <p>17 April 20</p>	<p>STATE OF MICHIGAN County of Lenawee City of Adrian</p> <p>Vicki Sentele _____ being first duly sworn, says that she is the <u>PRINCIPAL CLERK</u> of The Daily Telegram a newspaper published in the English language for the dissemination of local or transmitted news and intelligence of a general character, which is a duly qualified newspaper, and that annexed here to is a copy of a certain order taken from said newspaper, in which the order was published on the _____</p> <p>April 20, 2007</p> <p># _____</p> <p>Paid _____ Amount Due <u>\$63.50</u></p> <p>Subscribed and sworn to before me this day of <u>April 20</u> 2007</p> <p><u>V. Sentele</u></p> <p><u>S. L. Myers</u></p> <p>Sheri L. Myers Notary Public, Lenawee County, Michigan My Commission Expires June 17, 2010</p>
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# Advertising Receipt

RECEIVED  
LENAWEE COUNTY  
DRAIN COMMISSIONER'S OFFICE

The Daily Telegram  
133 N. Winter Street  
Adrian, MI 49221  
Phone: (517) 265-5111  
Fax: (517) 265-3030

487  
Stephen May  
Lenawee County Drain Commission  
425 N. Main  
Adrian, MI 49221

Cust#: 02100626-000  
Ad#: 05570418  
Phone: (517)264-4696  
Date: 04/18/07

Ad taker: ls Salesperson: Classification: 001

Description	Start	Stop	Ins.	Cost/Day	Surcharges	Total
01 The Daily Telegram Affidavit	04/20/07	04/20/07	1	61.50		61.50 2.00

**Payment Reference:**

**PUBLIC NOTICE**  
THE OPERATING PLAN FOR THE ROLLIN & WOODSTOCK WWTP FOR RECEIVING  
DOMESTIC SEPTAGE

The State of Michigan has amended part 117 of the Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994, P.A. 451, to require the development of an Operating Plan describing the receipt of septic wastes.

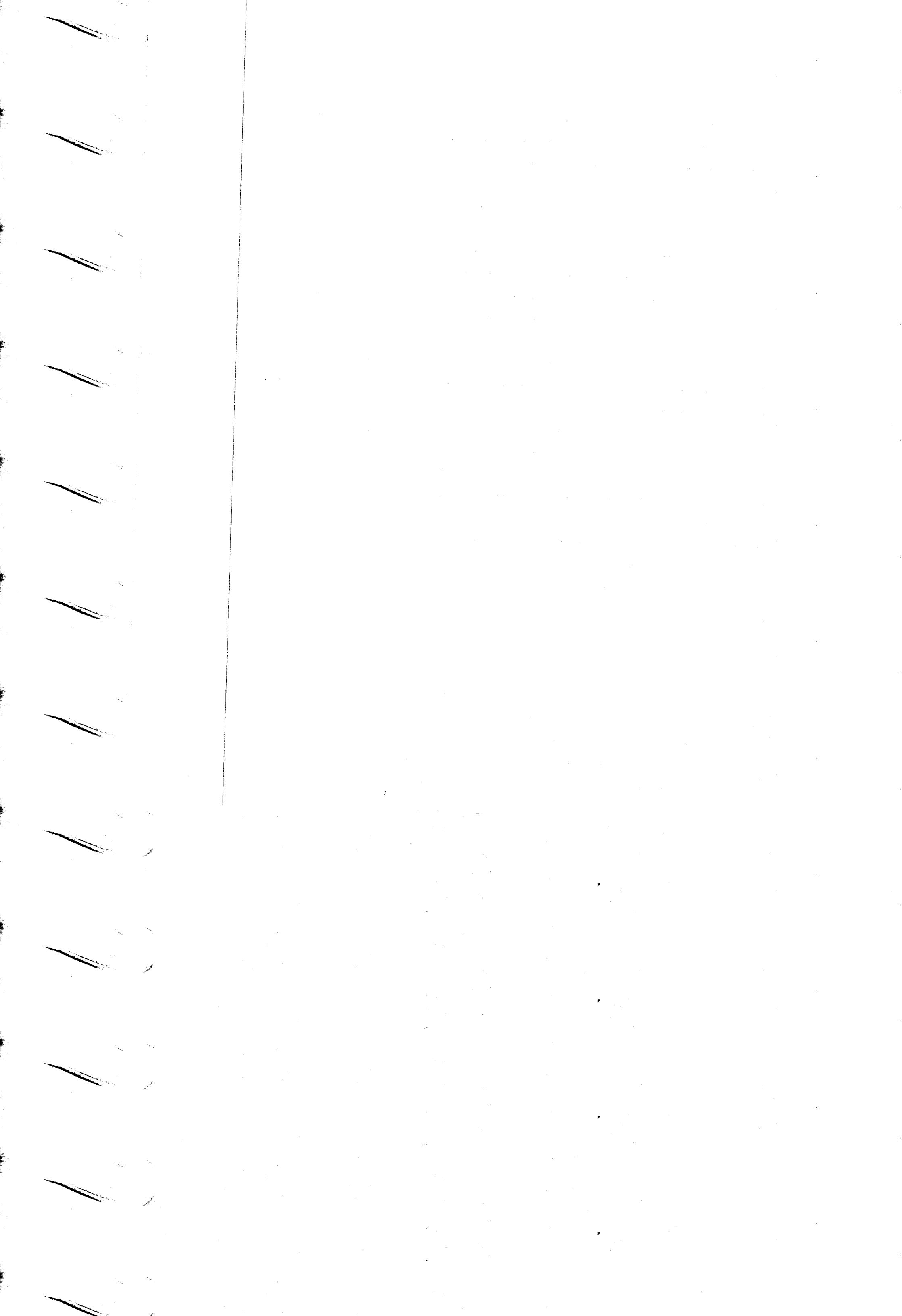
The Rollin & Woodstock Plant (R-W WWTP) has contracted with Hazen & Sawyer - Environmental Engineers to study the head works capacity. Because of the R-W WWTP minimal loadings, a study was approved by DEQ for the plant to receive 6,000 gallons per day of septic for 90 days. The study was completed in January of 2007, with little or no noticeable impact to plant discharge.

The R-W WWTP will continue to receive Septage during the interim period during the design phase of a permanent receiving station at a rate of 6,000 to 8,000 gallons per day and up to 18,000 gallons per day with MDEQ approval of submitted plan.

A new operating plan includes and describes: the location, hours of operation, limits to acceptance of domestic septic, fee structure, service area and other conditions applicable

**Total:** 63.50  
**Tax:** 0.00  
**Net:** 63.50  
**Prepaid:** 0.00

**Total Due** 63.50



**OPERATING PLAN TO RECEIVE SEPTAGE AT THE  
ROLLIN & WOODSTOCK WASTEWATER TREATMENT PLANT**

The Rollin & Woodstock Wastewater Treatment Plant receives domestic sewage from the townships of Rollin and Woodstock and the Village of Addison, as well as domestic septage from Lenawee County and Hillsdale County. The Plant is operated by the Lenawee County Drain Commissioner, under the authority of the Rollin & Woodstock Sanitary Drain Drainage Board. Jack Dillon is the current Superintendent. The septage is trucked to the septage receiving facility by independent haulers.

The State of Michigan has amended Part 117 of the Septage Waste Servicer's, of the Natural Resources and Environmental Protection Act, 1994, P.A. 451, to require the development of an Operating Plan describing the receipt of septage wastes. This plan is submitted in response to this requirement.

**1.) The Rollin & Woodstock WWTP service area and capacities.**

The Rollin & Woodstock WWTP is located at 6100 Sorby Road, Addison, Michigan 49220. The Rollin & Woodstock Plant (R-W WWTP) receives sewage from Devils Lake and Round Lake areas located in the townships of Rollin and Woodstock and the Village of Addison.

The R-W WWTP is regulated under NPDES permit MI0027669 and is authorized to treat a maximum flow of 1.2 MGD with a peak flow of 3 MGD.

**2.) Domestic Septage Waste**

The R-W WWTP will receive domestic septage from the counties of Lenawee and Hillsdale in accordance with State laws. No other type of septage will be received at the R-W WWTP including, food establishment, commercial, portable toilet, or recreational vehicle waste.

**3.) Service Area of Septage**

The R-W WWTP will receive septage primarily from Lenawee County and Hillsdale County. State Law requires any septage hauler pumping septage within 15 miles of the R-W WWTP, and the hauler does not have 50,000 gallons of storage and can not land apply they are required to bring that septage to R-W WWTP receiver station. The septage receiving service area will increase to a 25 mile radius from the plant in 2010. Haulers using R-W WWTP receiver station will be on a voluntary basis, and not mandatory. Haulers will be able to land apply per MDEQ requirements.

**OPERATING PLAN TO RECEIVE SEPTAGE AT THE  
ROLLIN & WOODSTOCK WASTEWATER TREATMENT PLANT**

**4.) Other Conditions for Receiving Septage Waste**

The following additional conditions have been established for the receipt of septage waste.

- a. All trucks must be licensed through the Michigan Department of Environmental Quality (MDEQ) as a condition of applying for permission to discharge.
- b. Each truck must have a written chain of custody to verify where the septage was pumped and to confirm origin of the septage.
- c. All trucks shall be equipped to connect to the R-W WWTP receiving facility station.
- d. Each company will pre-apply for permit to discharge to the plant, so that R-W WWTP can keep track of gallons unloaded, feed rates to the screen.
- e. The R-W WWTP may withhold discharge at any time should plant conditions warrant or if it has received the maximum amount for that day.
- f. The maximum discharge limit for a single day will be 18,000 gallons, Monday through Friday, 7:30 am to 4:00 pm. except holidays.
- g. The R-W WWTP may receive more than 18,000 gallons per day on an emergency basis. The additional septage will be diverted to one of two gravity sludge thickeners, and processed during the weekend or during slow periods.
- h. At no time will septage be allowed to deteriorate the discharge quality of the plant process. Only the dewatering (supernatant) will be allowed back to the head works of the plant. The septage will be kept separated from the normal operation of the plant to receive sewage from the Townships and the Village.
- i. The Card access will allow the R-W WWTP to monitor the septage flow and provide information for billing and prevent unauthorized use.
- j. Should R-W WWTP have a problem, flow or septage or supernatant would be sent to the EQ basin for pre-treatment.

**OPERATING PLAN TO RECEIVE SEPTAGE AT THE  
ROLLIN & WOODSTOCK WASTEWATER TREATMENT PLANT**

**4.) Fee Structure to Dispose of Septage for Treatment**

Each hauler will be charged \$ 55.00 per 1,000 gallons or \$.055 cents per gallon.

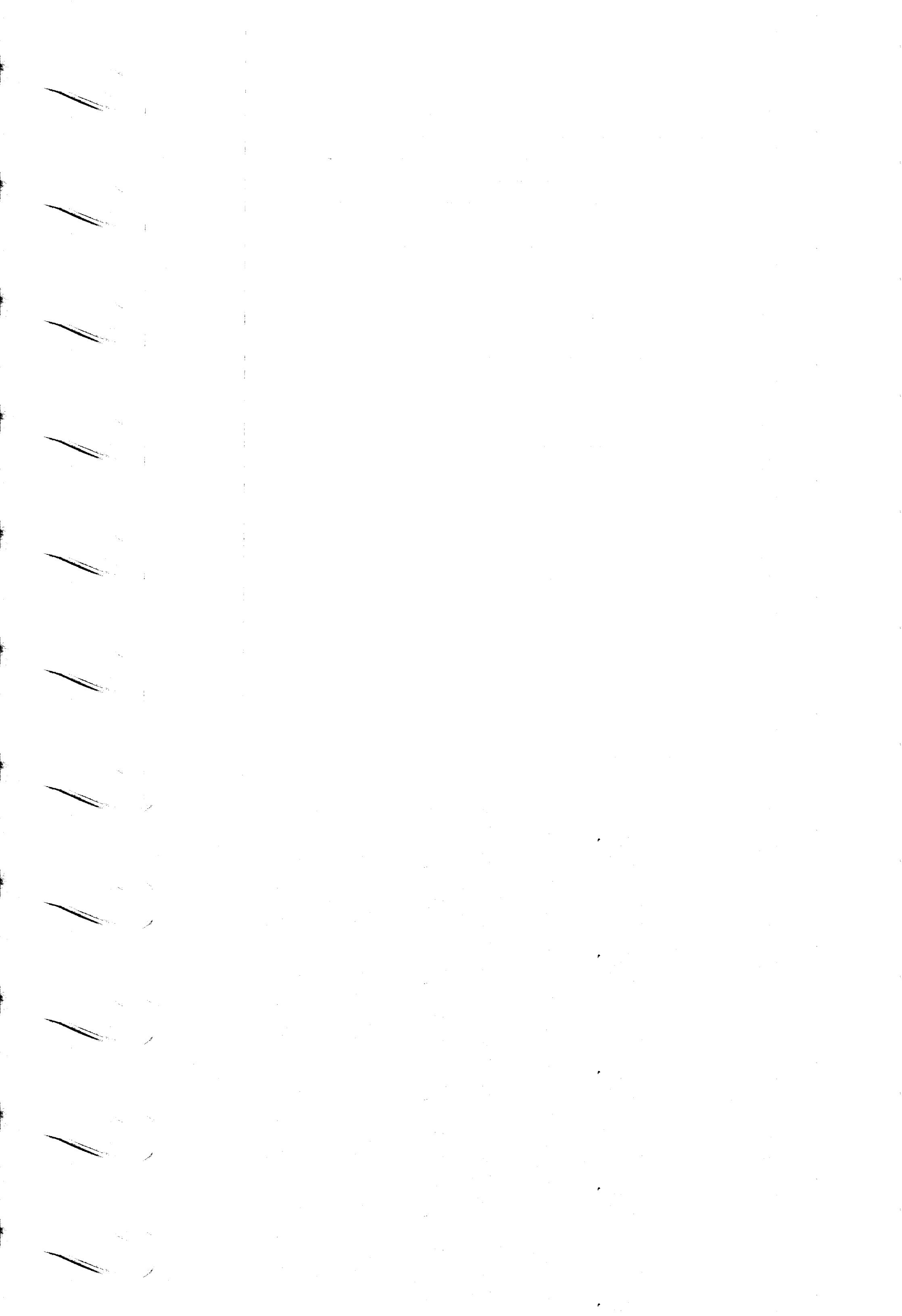
- a. \$25.00 - operations and maintenance
- b. \$17.00 - debt service of loan
- c. \$10.00 - tank storage lease - R-W WWTP
- d. \$3.00 - miscellaneous

**5.) Odor Control**

Plant has had no odor problems, the screen and primary digesters will be covered, and odor control measures will be installed if needed.

**6.) Screenings**

All screening are washed with plant non-potable water in the screen, placed in plant drying beds to dry and will be taken to land-fill.



## The Rollin & Woodstock Wastewater Treatment Plant Septage Receiving Facility Protocol

A pilot program was completed at the Rollin & Woodstock WWTP to determine the capacity of the treatment plant to accept septage. The second goal of the program was to gather data on the septage characteristics and study the effects of the septage on the discharge effluent of the plant. MDEQ allowed the plant to accept 6,000 gallon of septage per day which was screened and pumped to aerobic digesters that were not in use. The dissolved oxygen was kept at or above 2 mg/l. After 60 days into the study the amount of septage was increased to 8,000 gallon per day. This had minimal effect on the plant. We did not witness any odors coming from the process. The supernatant that was taken from the process and pumped back to the head-works of the plant showed no effects on the discharge of the plant.

### Project Plan Conclusion

The plant has two aerobic digesters with a capacity of 50,000 gallons each. The pilot study demonstrated that one digester could treat 8,000 gallons per day of septage with no adverse effects on the plant or the discharge. In the new protocol, the septage will be divided between both aerobic digesters which will allow 16,000 – 18,000 gallons per day of septage to be processed at the plant. The septage would only be sent to the solids handling portion of the plant. The supernatant would be pumped to the head-works of the plant which would be controlled by the operator. If there should be a problem with the septage or the plant discharge, the plant would discontinue to accept septage.

### Mode of Operation

The project plan is to construct a building at the west end of the gravity thickeners and install the JWC Honey Monster Septage Receiving System. The septage hauler will drive up to the building and connect to a (4) inch stand pipe located next to the drive. The hauler will then insert a card (that will be issued to him by the Lenawee County Drain Commissioner) to start the screen and open the inlet valve to the screen. The septage will flow through the screen into a pumping station located at the gravity thickeners. The station will turn on at a preset level and transfer the septage to the predetermined digester or digesters.

The septage will be mixed with treated sludge in the primary digesters. Sludge will be transferred daily from the primary digesters to a decant tank, there the sludge will be allowed to settle and the solids and supernatant will separate and the supernatant will be fed back to the head-works of the plant. The solids that settle will be pumped to a storage digester and mixed with waste activated sludge from the plant process. The storage digester will be decanted and the Bio-solids will be concentrated in preparation for land application at an approved site. All Bio-solids will conform with State regulations and in accordance with the R-W WWTP Bio-solids Management Plan.

## The Rollin & Woodstock Wastewater Treatment Plant Septage Receiving Facility Protocol

Because of winter months the primary digesters and decant tank will be covered and odor control will be installed. Should a hauler have an emergency and have to unload at the plant, overflow will be sent to the gravity thickener and will be fed to the digester at the operator's discretion or during low flows of septage. The gravity thickeners will give the plant 50,000 gallons of emergency storage. This cover will keep odor in control and keep the digesters from freezing during winter months.

The supernatant will be fed back to the head-works at a rate so not to affect the plant discharge quality. Should the system develop a problem all septage activities will be suspended until the problem is corrected. The septage program at no time will diminish the plants ability to treat the sewage coming to the plant from its customers.

### Septage Hauler Responsibilities

1. Haulers will complete a chain of custody documenting the location and date pumped
2. The hauler will have a permit to unload at the R-W WWTP by having a card (issued by the Lenawee County Drain Commissioner) to start the receiving station.
3. The card will allow R-W WWTP to keep track of the unloading flow rate and the total gallons unloaded.
4. The hauler must be licensed and insured.
5. Any septage load not meeting domestic quality that may present some type of characteristic not compatible with the plant may be refused.
6. The hauler will have a compatible connection to R-W WWTP receiver.
7. The hauler must be able to pressurize the truck tank to clean out the connection and piping going to the screen. This will help prevent freezing in winter and septage being spilled on the ground.
8. It is the haulers responsibility to report any problems with equipment to the R-W WWTP staff.
9. The hauler will enter the North gate at the plant drive West around the storage tanks turn South and drive up to the inlet pipe to the screen, after unloading they will proceed South than turn East following the drive and leave by way of the North gate.

### The Responsibilities of the Operator at R-W WWTP

1. Will keep equipment in proper working condition.
2. Will be inspected on a daily basis.
3. The screen building will have a gas detector with audio and visual alarm warning system.

# The Rollin & Woodstock Wastewater Treatment Plant

## Septage Receiving Facility Protocol

4. Odor control will be controlled by vent fans which will run when screen is started or a person entering the building or detection limits are out of compliance for safe entrance.
5. The hauler will be billed by the Lenawee County Drain Commissioner on a monthly basis.

### Hydraulic and Organic Loading Capacity

The septage will not flow through the head-works, but will enter the sludge handling and processing streams. The supernatant will be pumped back to the head-works. Should the supernatant affect the plant, the supernatant will be shut off and the flow will be sent to the Equalization Basin.

### Section D of the Operating Plan shows the loadings and capacities.

The Organic loading on the head-works was contracted to Hazen & Sawyer Engineers;

**Table 1** shows the projected loading and available capacities for the plant in the year of 2025.

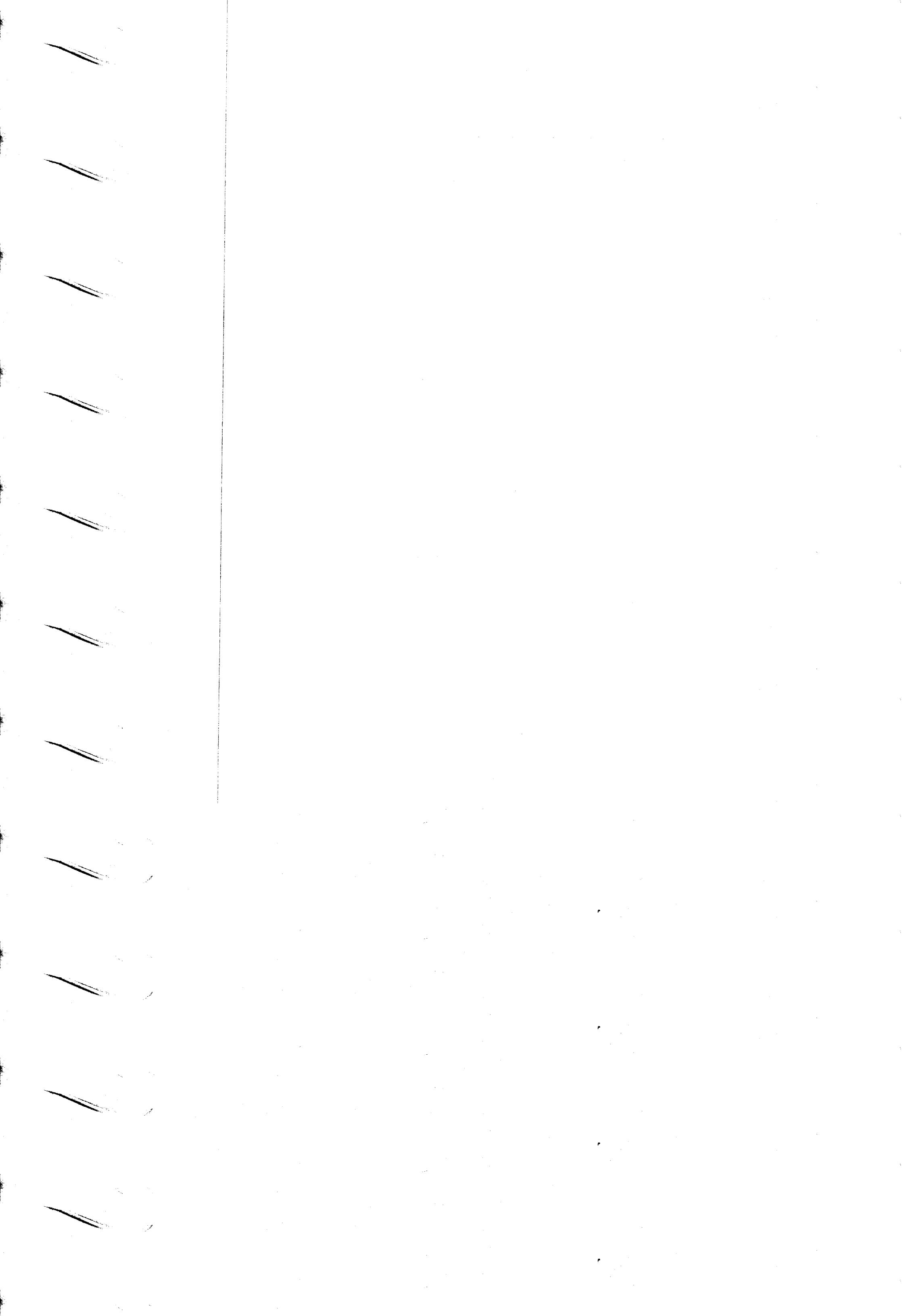
**Table 2** shows the loading of the supernatant going back to the head-works at volumes equal to the septage being accepted. The Peak Day is the highest amount sent to the head-works in one day.

**Table 3** shows the same loadings in pounds per day at different loadings volumes.

**Table 4** shows the capacity available for Rollin & Woodstock future flows. The Supernatant should have minimal effect on the plant discharge.

### Digester Capacity

The next page in section (D) shows the digester volumes and capacities of the plant. Total plant capacity includes hauling bio-solids two times per year achieving a total volume of 1,662,000 million gallons per year. Total septage that could be received is 4,320,000 million gallons per year. The plant could expect to see 70% to 76% reduction in volume by solids separation or (decanting) in the digesters and sludge storage. This reduction would leave 787,200 gallons for future capacity. The plant has a belt thickener and two gravity thickeners if more capacity is needed to meet future flows.



The Rollin Woodstock Wastewater Treatment Plant Septage Receiving Facility Protocol

Hazen & Sawyer Projected Loadings.

Table 1

Rollin & Woodstock WWTP (2025)

Parameter	Average Day	Max Month	Peak Day	Max Month Loading	PLANT CAPACITY	AVAILABLE CAPACITY
Flow, MGD	1.0	1.10	2.20	1.10	1.20	0.10 MGD
BOD mg/l	60	93	139	851 ppd	1201 ppd	350 ppd
TSS mg/l	61	78	n/a	712 ppd	1501 ppd	789 ppd
TKN mg/l	32	32	32	294 ppd	N/A	N/A
NH3-N mg/l	20	20	20	183 ppd	300 ppd	117 ppd
Total-P mg/l	3.0	4.3	n/a	40 ppd	60 ppd	30 ppd

TABLE 2

Actual Supernatant Loading applied to Plant

Parameter	Project Value	Month Avg Day	Month Max Day	Peak Day
Volume , gpd	6,000	8,723	18,000	37,000
BOD mg/l	6	10	18	
TSS mg/l	10	22	42	
VSS mg/l	9	16	28	
TKN mg/l	3	4	5	
NH3-N mg/l	0.16	0.6	2.1	
Total P mg/l	0.5	0.9	1.6	

TABLE 3

Actual Loadings Pounds Per Day (ppd)

Parameters	Project Design	Monthly Avg	Monthly Max	Peak Day
BOD ppd	0.3	0.7	2.7	5.5
TSS ppd	0.5	1.5	6.3	13
VSS ppd	0.5	1.12	4.2	8.6
TKN ppd	0.2	0.3	0.75	1.5
NH3-N ppd	0.01	0.04	0.3	0.64
Total P ppd	0.03	0.06	0.24	0.49

Available Capacity

TABLE 4

	From Table 1	18,000 GALLONS	37,000 GALLONS	Available Capacity
Parameter	Available Capacity	Monthly Max	Peak Day Loading	Future
Flow, MGD	1.10	0.018	0.037	0.063
BOD ppd	350 ppd	2.7	5.5	344.5 ppd
TSS ppd	789 ppd	6.3	13	776 ppd
NH3-N ppd	117 ppd	0.3	6.4	110.6 ppd
Total P ppd	30 ppd	0.24	0.49	29.5 ppd

**OPERATING PLAN TO RECEIVE SEPTAGE AT THE  
ROLLIN & WOODSTOCK WASTEWATER TREATMENT PLANT**

**DIGESTER CAPACITY**

1) Primary Digesters = 2 tanks @ 50,000 gal. each	100,000 gallons
2) Decant Tank = 1 tank @ 20,000 gal.	20,000 gallons
3) Sludge Storage = 3 tanks @ 237,000 gal. each	711,000 gallons
<b><u>Total Treatment/Storage Capacity</u></b>	<b><u>831,000 gallons</u></b>

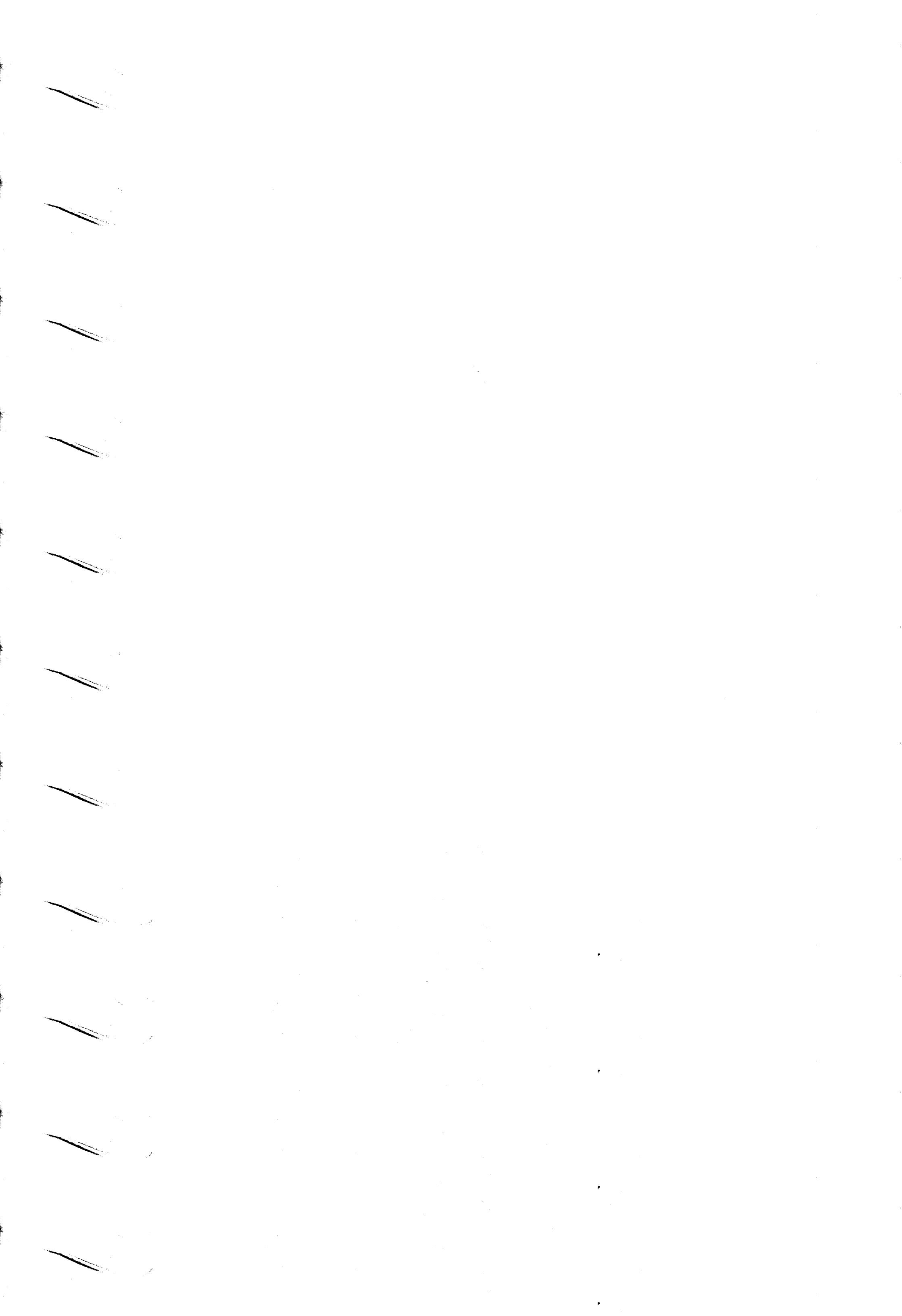
**Bio-Solids will be applied Spring and Fall doubling our storage capacity.**

**Total Holding Capacity**                           **1,662,000 gallons per year**

**Septage Receiving Capacity**

The plant may receive up to 18,000 gallons/day/ M-F.

- 1.) 18,000 gal. x 20 days/month x 12 months/year = 4,320,000 gallons/year.
- 2.) The Pilot study just completed by R-W WWTP demonstrated a 78% reduction in volume can be expected
- 3.) 410,750 gal of septage was received during our study. We decanted back to the head works of the plant 323,130 gallons of supernatant.
  - a.)  $323,130 \text{ gal} / 410,750 \times 100 = 78\%$  reduction in volume.
  - b.) The plant wasted from the treatment process a total of 49,720 gallon of waste activated sludge (WAS) during our study.
  - c.)  $410,750 \text{ gal. septage} + 49,720 \text{ was} = 460,470$  total gallons of septage and waste activated sludge was received by the solids handling portion of the treatment plant during our study.
  - d.)  $323,130 \text{ gal} / 460,470 \text{ gal} \times 100 = 70\%$  reduction in sludge volume.
- 4.) 4,320,000 gallons received/year x 70% reduction in volume = 3,024,000 gallon of supernatant will be sent back to the head works to be processed by the plant, with 1,296,000 gallons going into sludge holding.



**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

DECEMBER 2006										* Weather Codes		SUPERINTENDENT'S SIGNATURE			
ID	PLANT#	12 MO	2006 YR	500 SPC						1 Clear	2 Partly Cloudy	3 Cloudy	4 Rain	5 Snow	6 Windy
D	A	WEATHER	PRECIP	FLOW	PH	BOD 5	SS	SS	TOT - P	1.2	9.6				
	Y	*CODE	INCHES	MGD	SU	mg/l	LBS.	mg/l	LBS.	1.1	8.0				
PN	SF	00033	00045	50050	OO400	OO310	00530	85002	865	203	1.1	7.8			
1				1.653						256	1.1				
2				0.976						32	1.1				
3				0.957						225	1.1				
4				0.868						31	1.1				
5				0.844						233	1.1				
6				0.810						40	1.5				
7				0.754						48	1.5				
8				0.765						302	1.5				
9				0.778						52	2.0				
10				0.779						327	2.0				
11				0.785						442	2.0				
12				1.033						426	2.0				
13				0.905						308	1.4				
14				0.913						51	354				
15				0.888						446	1.4				
16				0.847						41	408				
17				0.818						328	1.4				
18				0.760						35	267				
19				0.757						53	1.4				
20				0.762						322	1.4				
21				0.910						210	248				
22				0.862						39	1.1				
23				0.937						53	7.0				
24				0.796						362					
25				0.921						63					
26				0.918						400					
27				0.843						336					
28				0.816						51					
29				0.800						322					
30				0.837						53					
31				1.223						210					
TOT				27.515						5285					
Avg				0.888						50					
MIN				0.754						31					
MAX				1.653						210					

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**PLANT INFLUENT SHEET  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669**

NOVEMBER 2006

D A Y	ID PLANT#	460150 MO	11 YR	2006 SPC	500 SPC	WEATHER TYPE	PRECIP	FLOW	PH	BOD 5	BOD 5	SS	SS	TOT - P	SVS	Weather Codes		SUPERINTENDENT'S SIGNATURE JACK R. DILLON								
																*CODE	INCHES	MGD	SU	mg/l	LBS.	mg/l	LBS.	mg/l		
1	00033	00045	50050	00400	00310	0.637	0.649	38	202	47	250	1.4	74	4.9												
2								29	157	34	184	0.9														
3																										
4																										
5																										
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28																										
29																										
30																										
31																										
TOT			0		22,081												8228		7106			227.1				
Avg					0.736												68	411	61	374	1.9	11.4	40			
Min					0.637												20	118	32	184	0.9	4.9				
Max					1.123												315	1775	174	981	5.9	33.3				

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**PLANT INFILUENT SHEET  
ROLLIN WOODSTOCK WWTP  
ADDISON MI 49220  
PERMIT # 0027669**

OCTOBER 2006

\*

D A Y	ID PLANT#	460150 MO	06 YR	2005 SPC	WEATHER TYPE	PRECIP	FLOW	PH	BOD 5	SS	Weather Codes	<u>SUPERINTENDENT'S SIGNATURE</u>	
												JACK R. DILLON	
PN SF	00033	00045	50050	00400	00310	00301	85001	00330	85002	665	85004		
1			0.715	150	896	86	513	2.8				16.7	
2			0.747	40	232	44	274	1.7				10.6	
3			0.684	70	475	38	220	1.4				8.1	
4			0.813	44	268	85	577	1.9				12.9	
5			0.729	44	39	39	237	1.5				9.1	
6			0.710										
7			0.641										
8			0.661	154	850	70	386	2				11.0	
9			0.687	69	396	76	436	1.8				10.3	
10			0.690	34	196	38	219	1.4				8.1	
11			0.697	42	244	36	210	1.4				8.1	
12			0.687	45	258	41	235	1.4				8.0	
13			0.731										
14			0.714										
15			0.689	146	840	63	362	2.1				12.1	
16			0.732	49	299	38	232	1.5				9.2	
17			0.892	40	298	62	462	1.2				8.9	
18			0.730	26	158	29	177	1.2				7.3	
19			0.705	51	300	48	283	1.7				10.0	
20			0.686										
21			0.708										
22			0.646	126	680	77	415	1.7				9.2	
23			0.664	82	455	49	272	1.5				8.3	
24			0.661	34	188	46	254	1.4				7.7	
25			0.610	35	178	37	188	1.6				8.1	
26			0.657	44	241	45	247	1.5				8.2	
27			0.852										
28			0.822										
29			0.713	51	304	50	298	1.4				8.3	
30			0.709	33	195	37	219	1.3				7.7	
31			0.675	26	147	26	147	1.8				10.1	
TOT		0	22.067		8098		6864					218.3	
Avg			0.712	63	368	50	298	1.6				9.5	
MIN			0.61	26	158	29	177	1.2				7.3	
MAX			0.892	154	896	86	577	2.8				16.7	

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**PLANT INFLUENT SHEET**  
**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 00277669**

SUPERINTENDENT'S SIGNATURE										
JACK R. DILLON										
ID	PLANT#		9	2006	500	SPC	WEATHER	PRECIP	FLOW	PH
	*CODE	INCHES	MO	YR	mg/l	LBS.	BOD	5	BOD	5
PN	00033	00045	50050	00400	00310	85001	00530	85002	665	85004
D	A	Y	SF	1	3	0.754				
1	2	3	0.781							
2	1	1	0.770							
3	4	2	0.737							
4	5	2	0.686							
5	6	2	0.672							
6	7	2	0.663							
7	8	2	0.727							
8	9	34	0.688							
9	10	3	0.701							
10	11	24	0.05							
11	12	34	0.32							
12	13	24	0.13							
13	14	3	0.707							
14	15	3	0.730							
15	16	3	0.734							
16	17	34	0.03							
17	18	34	0.31							
18	19	2	0.694							
19	20	1	0.695							
20	21	1	0.645							
21	22	34	0.21							
22	23	34	0.15							
23	24	3	0.647							
24	25	2	0.625							
25	26	1	0.634							
26	27	2	0.654							
27	28	2	0.664							
28	29	234	0.15							
29	30	34	0.40							
30	31		0.652							
TOT			1.75		20.736				9068	7188
AVG					0.691				93	378
MIN					0.625				33	183
MAX					0.781				206	1268

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**PLANT INFLUENT SHEET**  
**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

AUGUST 2006										SUPERINTENDENT'S SIGNATURE					
ID	PLANT#	MO	2006 YR	500 SPC	WEATHER TYPE	PRECIP	FLOW	PH	BOD 5	BOD 5	SS	SS	TOT - P	TOT - P	SVS
D A Y	*CODE	INCHES	MGD	SU	mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l
PN SF	00033	00045	50050	00400	00310	85001	00530	85002	665	85004					
1	2	0.18	0.760	0.760	0.769	60	385	55	353	1.8	11.6				
2	13		0.739	0.739	0.792	108	666	92	568	2.5	15.4				
3	34		0.813	0.813	0.820	84	533	83	527	2.3	14.6				
4	1		0.792	0.792	0.792	183	1253	122	835	7.4	50.7				
5	5		0.786	0.786	0.808	83	560	51	344	4.4	29.7				
6	6		0.786	0.786	0.786	44	289	42	276	2.9	19.0				
7	7		0.786	0.786	0.786	54	332	34	209	3.0	18.5				
8	8		0.737	0.737	0.772										
9	9		0.772	0.772	0.858										
10	10		0.858	0.858	0.915										
11	11		0.915	0.915	0.856										
12	12		0.856	0.856	0.769										
13	13		0.764	0.764	0.647										
14	14		0.662	0.662	0.647										
15	15		0.636	0.636	0.647										
16	16		0.636	0.636	0.739										
17	17		0.647	0.647	0.649										
18	18		0.54	0.54	0.649										
19	19		0.769	0.769	0.649										
20	20		0.691	0.691	0.657										
21	21		0.649	0.649	0.619										
22	22		0.657	0.657	0.619										
23	23		0.619	0.619	0.693										
24	24		0.02	0.02	0.707										
25	25		0.707	0.707	0.700										
26	26		0.700	0.700	0.791										
27	27		0.791	0.791	0.773										
28	28		0.773	0.773	0.762										
29	29		0.762	0.762	0.682										
30	30		0.682	0.682	0.693										
31	31		0.693	0.693	0.707										
TOT			2.61	23.059					8792		9890		351.0		
Avg			0.744						77	463	71	430	2.6	16.0	
Min			0.619						44	280	30	193	1.4	8.1	
Max			0.915						183	1253	164	912	7.4	50.7	



## PLANT INFLUENT SHEET

ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

JUNE 2006

D ID	PLANT#	06 MO	2006 YR	500 SPC	WEATHER TYPE	PRECIP INCHES	FLOW	PH	BOD 5	SS	TOT - P	TOT - P	SVS	Weather Codes		SUPERINTENDENT'S SIGNATU				
														*CODE	MGD	SU	mg/l	JACK R. DILLON		
PN SF	00033	00045	50050	00400	3	0.01	0.909	46	328	40	291	1.8	13.1							
	2	24	0.01	0.956	4	1	0.872	45	438	43	309	1.8	12.9							
	3	3		0.989	5	2	0.860	61	69	59	419	1.6	11.4							
	6	34	0.06	0.850	6	34	0.938	43	337	49	384	1.4	11.0							
	7	24	0.07	0.879	7	24	0.879	33	242	33	242	1.2	8.8							
	8				8															
	9	1		0.968	9	1	0.946	10	857	121	829	2.4	16.5							
	10	1		0.946	11	2	0.821	11	625	52	378	1.6	11.6							
	12	1		0.870	12	1	0.818	12	280	35	239	1.4	9.6							
	13	2		0.818	13	2	0.845	13	32	226	31	219	1.2	8.5						
	14	1		0.845	14	1	0.848	14	67	474	68	481	1.9	13.5						
	15	1		0.848	15	1	0.947	15												
	16	1			16	1		16												
	17	2		0.911	17	2	0.911	17	100	773	62	479	1.8	13.9						
	18	34	0.34	0.926	19	23	0.878	19	140	1026	75	550	2.0	14.7						
	20	24	0.56	0.824	21	34	1.18	20	43	296	42	289	1.4	9.6						
	22	2		0.997	22	2	0.911	22	60	499	63	524	1.6	13.3						
	23	2		0.857	23	2	0.857	23	41	312	32	243	1.0	7.6						
	24	1		0.824	24	1	0.824	24	150	1082	78	563	2.6	18.8						
	25	2		0.864	25	2	0.777	25	43	279	36	234	1.2	7.8						
	26	2		0.812	26	2	0.812	26	72	488	56	380	1.4	9.5						
	27	2		0.782	27	24	0.10	27	36	235	39	255	1.3	8.5						
	28	24		0.827	28	1		28	43	297	40	276	1.4	9.7						
	29	1		0.887	29			29												
	30	1			30			30												
	31				31			31												
	TOT				2.32		26.393			9934		7949		240.7						
	Avg				0.880		66		473		52		379		1.6					
	Min				0.777		32		226		31		219		1.0					
	Max				0.997		150		1082		121		829		2.6					

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

MAY 2006										Weather Codes						SUPERINTENDENT'S SIGNATURE	
ID	PLANT#	05 MO	2006 YR	500 SPC						1 Clear	2 Partly Cloudy	3 Cloudy	4 Rain	5 Snow	6 Windy	JACK R. DILLON	
D A Y	WEATHER TYPE	PRECIP	FLOW	PH	BOD 5	BOD 5	SS	SS	TOT - P	TOT - P	TOT - P	TOT - P	TOT - P	TOT - P	SVS		
PN SF	*CODE	INCHES	MGD	SU	mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	mg/l	
1	2		0.861		49	352	86	618	1.8	12.9							
2			0.954		34	271	35	279	1.1	8.8							
3	34	0.55	0.889		34	252	39	290	1.0	7.4							
4	3		0.869		29	210	31	225	1.0	7.3							
5	1		0.898														
6	1		0.912														
7	2		0.868														
8	1		0.906														
9			0.883														
10	24	1.68	1.079														
11	24	0.18	1.113														
12	34	0.10	1.084														
13	34	0.23	1.078														
14	24	0.30	1.033														
15	34	0.28	1.145														
16	3		1.123														
17	34	0.05	1.011														
18	34	0.12	1.033														
19	2		1.080														
20	2		0.908														
21	2		1.002														
22	1		0.913														
23	2		0.910														
24	24	0.10	0.904														
25	34	0.11	0.965														
26	1		1.024														
27	1		1.075														
28			1.115														
29	3		0.956														
30	2		0.925														
31	34	0.05	0.963														
TOT		3.75	30.489					7387		9108						254.0	
Avg			0.984					45	369	51	414		1.4			11.5	
Min			0.861					21	159	24	201		1.0			7.3	
Max			1.145					97	782	118	952		2.8			28.9	

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**PLANT INFLUENT SHEET**  
**ROLLIN-WOODSTOCK WW**  
**ADDISON MI. 49220**  
**PERRMIT # 0027669**

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**PLANT INFLUENT SHEET  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI 49220  
PERMIT # 0027669**

MARCH 2006										Weather Codes				SUPERINTENDENT'S SIGNATURE		
D A Y	ID	PLANT#	MO	2006 YR	500 SPC	WEATHER TYPE	PRECIP	FLOW	PH	BOD 5	SS	SS	TOT - P	SVS	SUPERINTENDENT'S SIGNATURE	
										mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	JACK R. DILLON
1	00033	00045	50050	00400	00310	34	0.855	38	7.1	506	46	323	1.3	9.1	34	
2						35	0.852	33	235	329	44	308	1.5	10.5		
3						2	0.830			30	211	27	190	1.0	7.0	
4						1	0.841			31	226	35	255	1.0	7.3	
5						25	0.05			47	407	39	338	1.1	9.5	
6						24	0.03									
7						24	0.838									
8						8	0.842									
9						24	0.21									
10						9	0.873									
11						34	0.77									
12						10	1.038									
13						3	1.126									
14						11	0.30									
15						12	0.30									
16						13	0.78									
17						14	1.149									
18						15	1.557									
19						16	1.236									
20						17	1.106									
21						18	1.063									
22						19	1.067									
23						20	1.000									
24						21	0.901									
25						22	0.943									
26						23	0.929									
27						24	0.902									
28						25	0.912									
29						26	0.936									
30						27	0.892									
31						28	0.887									
						29	0.895									
						30	0.892									
						31	0.874									
						24	0.09									
						32	0.902									
						33	0.893									
						34	0.06									
						35	0.903									
						24	0.05									
						25	0.957									
						26	0.968									
						27	0.830									
						28	1.557									
						29	0.830									
						30	1.557									
						31	0.830									
						32	1.557									
						33	0.830									
						34	1.557									
						35	0.830									
						36	1.557									
						37	0.830									
						38	1.557									
						39	0.830									
						40	1.557									
						41	0.830									
						42	1.557									
						43	0.830									
						44	1.557									
						45	0.830									
						46	1.557									
						47	0.830									
						48	1.557									
						49	0.830									
						50	1.557									
						51	0.830									
						52	1.557									
						53	0.830									
						54	1.557									
						55	0.830									
						56	1.557									
						57	0.830									
						58	1.557									
						59	0.830									
						60	1.557									
						61	0.830									
						62	1.557									
						63	0.830									

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**PLANT INFLUENT SHEET  
ROLLINGWOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669**

FEBRUARY 2006

\*

D A Y	ID PLANT#	02 MO	2006 YR	500 SPC	PH	BOD 5	SS	LBS. mg/l	TOT - P	TOT - P	SVS	REMARK	<u>SUPERINTENDENT'S SIGNATURE</u>	
													JACK R. DILLON	
PN SF	00033	00045	50050	00400	00310	85001	00530	85002	665	85004				
1	34	0.25	0.996		30	249	35	291	0.90	7.5				
2	34	0.08	0.983		49	402	63	517	1.2	9.8				
3	3		1.027											
4	3		1.215											
5	345	0.41	1.059		74	654	126	1114	2.0	17.7				
6	1		1.062		34	302	40	355	0.88	7.8				
7	1		0.975		28	228	40	326	0.78	6.4				
8	35		0.944		29	229	38	300	0.82	6.5				
9	25	0.05	0.896		24	180	30	224	0.81	6.1				
10	3		0.951											
11	25	0.06	0.903											
12	1		0.834											
13	1		0.869											
14	2		0.858		31	222	42	305	1.0	7.3				
15	34	0.60	0.969		57	461	35	229	0.86	6.2				
16	34	1.00	1.512		37	467	39	283	1.0	8.1				
17	1		1.518					492	1.1	13.9				
18	1		1.150											
19	1		1.019		51	434	31	264	1.2	10.2				
20	1		0.959		38	304	33	264	1.1	8.8				
21			0.979		35	286	25	204	1.9	15.5				
22	2		0.988		39	322	31	256	1.1	9.1				
23	1		0.979		32	262	27	221	1.1	9.0				
24	1		1.049											
25	1		0.939											
26	3		0.880		70	514	47	345	1.1	8.1				
27	25		0.914		37	282	36	275	1.5	11.4				
28	1		0.863		41	295	26	187	1.2	8.6				
29														
30														
31														
TOT		2.45	28.29					6094		6982		189.0		
AVG			1.010		41	339	43	349	1.2	9.5				
MIN			0.834		24	180	25	187	0.78	6.1				
MAX			1.518		74	654	126	1114	2	17.7				

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

**PLANT INFLUENT SHEET**

D A Y	WEATHER	PRECIP	FLOW	PH	BOD 5	SS	LBS.	mg/l	LBS.	mg/l	TOT - P	TOT - S	REMARKS	
													SUPERINTENDENT'S SIGNATURE	JACK R. DILLON
<b>JANUARY 2006</b>														
ID	460150	01	2006	500										
PLANT#	MO		YR	SPC										
PN	00033	00045	50050	00400	00310	00530	85002	665	85004					
SF														
1	34	0.07	0.890		31	230	47	349	1.4	10.4				
2	34	0.20	1.001		29	242	47	393	1.2	10.0				
3	34	0.05	0.974		43	350	70	569	1.2	9.8				
4	34	0.02	0.932		39	304	33	257	0.8	6.2				
5	3		0.881		33	243	34	250	0.82	6.0				
6	3		0.856											
7	3		0.836											
8	2		0.832											
9	2		0.816											
10	34	0.15	0.816											
11	2		0.833											
12	3		0.832											
13	345	0.91	1.195											
14	1		1.050											
15	1		0.865											
16	24	0.06	0.902											
17	345	0.59	1.070											
18	3		0.972											
19	2		0.979											
20	34	0.47	1.183											
21			1.093											
22	1		0.947											
23	2		0.985											
24	25		0.911											
25	3		0.889											
26	1		0.850											
27	3		0.958											
28	34	1.00	1.015											
29	34	0.10	1.297											
30	24		1.099											
31	2		1.012											
TOT		3.62	29.771		1076	8410		9396		296.9				
Avg			0.960		49	382		52		409	1.6	12.9		
Min			0.816		26	177		29		209	0.78	6.0		
Max			1.297		89	671		87		769	6.9	56.8		

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI 49220**  
**PERMIT # 0027669**

**PLANT INFLUENT SHEET**

JANUARY 2006

D A Y	ID PLANT#	01 MO	2006 YR	500 SPC	WEATHER TYPE	PRECIP *CODE	FLOW INCHES	PH MGD	SU	BOD 5 mg/l	BOD 5 LBS.	SS mg/l	TOT - P LBS.	SVS	Weather Codes		<u>SUPERINTENDENT'S SIGNATURE</u> JACK R. DILLON
															1 Clear	2 Partly Cloudy	
1	00033	00045	50050	00400	1	3	1.118	64	597	34	317	1.9	17.7				
2		2	2	1.000	2	2	1.000	74	618	73	610	1.7	14.2				
3		3	2	0.971	3	2	0.971	99	803	121	981	3.1	25.1				
4		4	34	0.9	4	34	1.158	45	435	37	358	1.2	11.6				
5		5	34	0.17	5	34	1.284										
6		6	2		6	2	1.125										
7		7	35	0.28	7	35	1.086	56	508	49	444	1.6	14.5				
8		8	2		8	2	1.036	48	415	42	363	1.3	11.2				
9		9	35		9	35	0.982	32	262	28	230	1.0	8.2				
10		10	2		10	2	0.880	28	206	32	235	1.0	7.3				
11		11	34	0.03	11	34	0.922	42	323	46	354	1.2	9.2				
12		12	34	0.25	12	34	0.951										
13		13	34	0.12	13	34	0.972										
14		14	34	1.07	14	34	1.116	80	745	68	634	1.9	17.7				
15		15	2		15	2	1.373	52	596	31	355	1.6	18.3				
16		16	2		16	2	1.080	41	370	50	451	1.2	10.8				
17		17			17		0.972	39	317	34	276	1.1	8.9				
18		18	35		18	35	0.982	26	213	24	197	1.2	9.8				
19		19	2		19	2	1.043										
20		20	3		20	3	0.839										
21		21	35	0.07	21	35	0.887	27	200	28	207	1.1	8.1				
22		22	3		22	3	0.857	56	401	64	458	1.8	12.9				
23		23	35	0.04	23	35	0.874	39	285	32	234	1.1	8.0				
24		24	2		24	2	0.862	48	345	37	266	1.4	10.1				
25		25			25		0.798	56	373	38	586	2.3	15.3				
26		26			26		0.880										
27		27	5		27	5	0.809										
28		28	25	0.17	28	25	0.868	42	304	47	341	1.6	11.6				
29		29	35	0.07	29	35	0.803	44	295	28	188	1.2	8.0				
30		30	3		30	3	0.805	39	262	28	188	1.1	7.4				
31		31	3		31	3	0.791	58	383	30	198	1.0	6.6				
TOT			3.17	30.124				1135	9257		8471		272.9				
Avg								49	402	46	368	1.5	11.9				
Min								26	200	24	188	1.0	7.3				
Max								99	803	121	981	3.1	25.1				



**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**FINAL EFFLUENT SHEET  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669**

NOVEMBER 2006

ID	PLANT#	MO	2006 YR	269 SPC	SUPERINTENDENT'S SIGNATURE							
					D A Y	FLOW	SS	CBOD	NH4	PHOS.	pH	OXYGEN DO mg/l
PN	SF	MGD	LBS.	mg/l						mg/l	CT/100	SU
1	0.637	21	4	0	<2	0.7	0.13	3.3	0.63	1.1	7.5	8.2
2	0.649	49	9	0	<2	0.5	0.10	4.0	0.73	1.3	7.3	8.6
3	0.652									1.4	7.4	7.9
4	0.650											
5	0.671	73	13	11	2	0.6	0.11	5.3	0.95			
6	0.689	56	10	6	1	0.4	0.08	4.6	0.82	35	7.4	8.2
7	0.748	75	12	12	2	0.6	0.09	8.1	1.30	<20	7.6	7.5
8	0.691	58	10	6	1	0.4	0.07	4.4	0.77	<20	7.5	8.2
9	0.672	62	11	0	<2	0.4	0.07	4.5	0.80	20	7.4	9.2
10	0.677									21	7.4	8.5
11	0.781											
12	0.713	54	9	6	1	0.4	0.07	5.1	0.85			
13	0.708	53	9	12	2	0.7	0.12	4.2	0.71	49	7.5	8.7
14	0.730	49	8	6	1	<.05	0.05	3.8	0.63	24	7.4	8.2
15	0.714	30	5	6	1	1.5	0.26	4.0	0.98	24	7.6	8.6
16	0.952	56	7	16	2	0.4	0.05	5.5	0.69	<20	7.3	8.5
17	0.868									24	7.5	9.1
18	0.814											
19	0.738	43	7	0	<2	0.5	0.08	4.1	0.67			
20	0.713	30	5	0	<2	0.3	0.05	4.1	0.69	62	7.4	9.2
21	0.741	37	6	0	<2	0.0	<.05	4.3	0.69	49	7.5	9.3
22	0.736	25	4	0	<2	0.0	<.05	4.0	0.65	26	7.5	8.9
23	0.724	6	1	0	<2	0.0	<.05	4.7	0.78	<20	7.5	9.3
24	0.706									<10	7.5	9.2
25	0.733											
26	0.675	23	4	0	<2	1.1	0.20	4.3	0.77			
27	0.728	18	3	0	<4	0.4	0.07	4.3	0.70	<20	7.4	8.5
28	0.716	18	3	0	<2	0.4	0.06	4.1	0.69	<20	7.4	9.0
29	0.752	13	2	13	2	0.3	0.05	4.6	0.74	<20	7.4	8.7
30	1.123	103	11	0	<2	1.8	0.19	8.4	0.90	<20	7.4	8.4
31												
TOT		22.081										
Avg	0.736	43	7	5	2	0.5	0.10	4.7	0.77	11	7.4	8.6
MIN	0.637	6	1	0	1	0.0	0.05	3.3	0.63	11	7.3	7.5
MAX	1.123	103	13	16	2	1.8	0.26	8.4	1.30	62	7.6	9.3
7 DAY MAX		65	11	9	2	0.8	0.11					

**S . OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**FINAL EFFLUENT SHEET  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669**

OCTOBER 2006

ID	PLANT#	MO	2006 YR	269 SPC	<u>SUPERINTENDENT'S SIGNATURE</u>								
					FLOW	SS	CBOD	CBOD	NH4	NH4	PHOS.	FECAL	pH
D A Y	MGD	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	mg/l	mg/l	CT/100	SU
PN	SF												
1	0.715	24	4	0	<2	0.4	0.06	4.1	0.69	0.57	<10	7.4	7.3
2	0.747	31	5	6	1	0.3	0.05	3.6	0.57	0.62	<10	7.4	7.3
3	0.694	17	3	0	<2	0.5	0.07	4.9	0.73	0.79	<10	7.4	7.3
4	0.813	27	4	0	<2	0.4	0.07	4.8	0.79	0.79	<10	7.5	7.9
5	0.729	30	5	0	<2	0.4	0.07	4.8	0.79	0.79	<10	7.4	8.0
6	0.710												
7	0.641												
8	0.661	22	4	0	<2	0.0	<.05	4.3	0.78	0.87	14	7.5	7.8
9	0.687	17	3	6	1	0.3	0.06	5.0	0.87	0.88	<10	7.4	7.5
10	0.690	29	5	0	<2	0.4	0.07	5.1	0.88	0.97	11	7.6	7.5
11	0.697	23	4	0	<2	0.6	0.10	5.6	0.97	0.97	<10	7.5	8.2
12	0.687	57	10	0	<2	0.3	0.06	5.3	0.93	0.93	<10	7.5	8.5
13	0.731												
14	0.714												
15	0.689	40	7	0	<2	0.5	0.08	5.8	1.01	0.87	21	7.4	7.9
16	0.732	43	7	0	<2	0.4	0.06	5.3	0.74	0.63	50	7.4	8.2
17	0.892	52	7	0	<2	0.5	0.07	4.7	0.63	0.56	15	7.5	8.0
18	0.730	43	7	6	1	0.4	0.07	3.4	0.62	0.62	20	7.6	7.8
19	0.705	35	6	6	1	1.2	0.20	3.6	0.62	0.62	13	7.5	7.7
20	0.686												
21	0.708												
22	0.646	48	9	0	<2	0.6	0.12	5.0	0.92	0.99	31	7.4	8.0
23	0.664	44	8	0	<2	0.5	0.09	5.5	0.99	0.87	<10	7.5	8.3
24	0.661	61	11	0	<2	0.6	0.11	4.8	0.87	0.98	10	7.4	8.4
25	0.610	36	7	5	1	0.3	0.05	5.0	1.03	1.03	11	7.5	8.1
26	0.657	44	8	0	<2	0.8	0.15	5.6			12	7.5	8.2
27	0.852												
28	0.822												
29	0.713	42	7	0	<2	0.4	0.07	3.6	0.61	0.61	19	7.2	8.3
30	0.709	59	10	12	2	0.7	0.11	3.6	0.61	0.61	<10	7.4	8.0
31	0.675	45	8	0	<2	0.6	0.11	3.0	0.54	0.54			
TOT		22.067											
Avg	0.712	38	6	2	1	0.5	0.09	4.6	0.79	0.79	11	7.5	7.9
MIN	0.610	17	3	0	1	0.0	<.05	3.0	0.54	0.54	10	7.2	7.3
MAX	0.892	61	11	12	2	1.2	0.20	5.8	1.03	1.03	50	7.6	8.5
7 DAY MAX		47	9	2	2	0.6	0.10						

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**FINAL EFFLUENT SHEET**  
**ROLLIN-WOODSTOCK W**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

SEPT. 2006

JACK R. DILLON											
ID	PLANT#	9 MO	2006 YR	269 SPC							
D A Y	FLOW	SS	CBOD	NH4	PHOS.	FECAL	pH	OXYGEN DO mg/l	CBOD % REM		
	MGD	LBS.	mg/l	LBS.	mg/l	LBS.					
PN	310	85001	530	85002	650	85004					
1	0.754	19	3	19	3	0.3	0.05	4.8	0.77	<10	7.3
2	0.781										7.8
3	0.770										
4	0.737	12	2	6	1	0.5	0.08	4.8	0.78	15	7.4
5	0.686	11	2	0	<2	0.0	<.05	4.2	0.74	<10	7.3
6	0.672	6	1	0		0.0	<.05	5.0	0.90	<10	7.5
7	0.663	6	1					4.1	0.74	<10	7.4
8	0.727										7.8
9	0.688										
10	0.701	18	3	0	>2	0.5	0.08	5.7	0.98	<10	7.4
11	0.661	6	1	0	<2	0.3	0.05	5.0	0.90	<10	7.7
12	0.678	11	2	0	>2	0.0	<.05	5.1	0.91	<10	7.3
13	0.667	11	2	0	<2	0.0	<.05	4.7	0.85	<10	7.4
14	0.707	12	2			0.0	<.05	6.3	1.07	<10	7.4
15	0.730									<10	7.5
16	0.734										
17	0.711	12	2	0	<2	11.0	1.86	2.7	0.45	<10	7.4
18	0.740	12	2	0	<2	2.1	0.34	5.4	0.88	<10	8.2
19	0.694	12	2	12	2	0.3	0.06	4.6	0.79	<10	7.4
20	0.695	17	3	0	<2	0.3	0.06	4.6	0.79	<10	7.5
21	0.645	32	6	11	2	0.3	0.06	4.6	0.85	<10	7.4
22	0.646									<10	8.0
23	0.702										8.2
24	0.647	22	4	0	<2	0.4	0.07	3.9	0.73	<10	7.4
25	0.625	16	3	0	<2	0.6	0.11	3.9	0.74	<10	7.3
26	0.634	16	3	0	<2	0.0	<.05	3.5	0.66	<20	7.4
27	0.654	16	3	0	<2	0.3	0.06	3.6	0.66	<10	7.4
28	0.664	22	4	0	<2	0.8	0.14	3.7	0.66	<10	7.7
29	0.671										7.8
30	0.652										
31											
TOT		20.736									
Avg	0.691	14	3	3	<2	0.9	0.23	4.5	0.79	7.4	7.7
Min	0.625	6	1	0	1	0.0	<.05	2.7	0.45	7.3	7.3
Max	0.781	32	6	19	3	11.0	1.86	6.3	1.07	7.5	8.2
7 DAY MAX		18	3	4	2	2.8	0.48				

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

FINAL EFFLUENT SHEET  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669

AUGUST 2006

ID	PLANT#	MO	2006	269	SPC	SUPERINTENDENT'S SIGNATURE										
						D A Y	FLOW	SS	CBOD	CBOD	NH4	PHOS.	PHOS.	FECAL	pH	OXYGEN DO mg/l
PN	310	85001	530	85002	650	85004	LBS. mg/l	LBS. mg/l	LBS. mg/l	LBS. mg/l	0.08 <.05 0.10	4.7 4.7 4.7	0.74 0.76 0.74	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
1	0.769	6	1	0	<2	0.5	0.08 <.05 0.10	0.0	0.4	0.4	0.74 0.66 0.66	10.1 5.5 4.3	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
2	0.739	6	1	0	<2	0.6	0.0 <.05 0.10	0.2	0.7	0.7	0.74 0.66 0.66	10.1 5.5 4.1	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
3	0.760	6	1	0	<2	0.6	0.0 <.05 0.10	0.2	0.7	0.7	0.74 0.66 0.66	10.1 5.5 4.1	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
4	0.813	5	0.792	7	1	0	<2	1.6	0.23	0.23	10.1	1.48	<10	7.5	7.7	
5	0.820	6	7	1	0	<2	0.8	0.12	0.4	0.4	0.66 0.66 0.66	10.1 5.5 4.3	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
6	0.808	7	1	0	<2	0.4	0.0 <.05 0.10	0.2	0.4	0.4	0.74 0.66 0.66	10.1 5.5 4.1	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
8	0.786	3	0.4	0	<2	0.2	0.0 <.05 0.10	0	0.2	0.7	0.74 0.66 0.66	10.1 5.5 4.1	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
9	0.737	12	2	2	0	<2	1.2	0.19	0.19	0.19	0.74 0.66 0.66	10.1 5.5 4.1	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
10	0.772	13	2	2	0	<2	1.2	0.19	0.19	0.19	0.74 0.66 0.66	10.1 5.5 4.1	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
11	0.858	12	0.915	14	2	0	<2	0.7	0.11	0.11	0.74 0.66 0.66	10.1 5.5 4.8	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
12	0.915	13	0.856	14	2	0	<2	0.4	0.07	0.07	0.74 0.66 0.66	10.1 5.5 3.8	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
13	0.764	13	11	2	0	<2	0.3	0.06	0.3	0.06	0.74 0.66 0.66	10.1 5.5 3.3	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
14	0.662	11	11	2	0	<2	0.3	0.06	0.3	0.06	0.74 0.66 0.66	10.1 5.5 3.4	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
15	0.636	11	11	2	0	<2	0.3	0.06	0.3	0.06	0.74 0.66 0.66	10.1 5.5 3.4	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
16	0.647	11	11	2	0	<2	0.3	0.06	0.3	0.06	0.74 0.66 0.66	10.1 5.5 3.4	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8	
17	0.739	18	0.769	12	2	0	<2	0.3	0.06	0.3	0.06	0.74 0.66 0.66	10.1 5.5 4.6	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
18	0.691	20	0.691	12	2	0	<2	0.3	0.06	0.3	0.06	0.74 0.66 0.66	10.1 5.5 4.6	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
19	0.649	21	0.649	11	2	0	<2	0.0	<.05	0.0	<.05	0.68 0.68 0.68	10.1 5.5 3.7	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
20	0.657	22	0.657	11	2	0	<2	0.4	0.07	0.4	0.07	0.68 0.68 0.68	10.1 5.5 3.5	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
21	0.619	23	0.619	10	2	10	2	0	0.3	0.05	0.05	0.68 0.68 0.68	10.1 5.5 3.5	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
22	0.693	24	0.693	12	2	0	<2	0.3	0.05	0.3	0.05	0.73 0.73 0.73	10.1 5.5 4.2	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
23	0.707	25	0.707	13	2	0	<2	0.8	0.12	0.4	0.12	0.68 0.68 0.68	10.1 5.5 4.5	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
24	0.700	26	0.700	13	2	0	<2	0.0	<.05	0.4	0.06	0.68 0.68 0.68	10.1 5.5 4.2	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
25	0.773	27	0.773	6	1	6	1	1	0.4	0.06	0.4	0.68 0.68 0.68	10.1 5.5 4.2	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
26	0.762	28	0.762	6	1	6	1	0	<2	0.0	<.05	0.68 0.68 0.68	10.1 5.5 3.7	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
27	0.693	29	0.693	6	1	0	<2	0.0	<.05	0.0	<.05	0.68 0.68 0.68	10.1 5.5 4.0	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
28	0.682	30	0.693	17	3	0	<2	0.0	<.05	0.0	<.05	0.7 0.7 0.7	10.1 5.5 4.0	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
29	0.682	31	0.682	17	3	0	<2	0.0	<.05	0.0	<.05	0.7 0.7 0.7	10.1 5.5 4.0	<10 <10 <10	7.4 7.4 7.4	7.1 7.8 7.2 7.8
30	0.682	31	0.682	23.059	1	1	<2	0.6	0.12	4.6	0.74	7.4	7.4	7.4	7.7	
31	0.682	32	0.682	10	2	1	<2	0.6	0.12	4.6	0.74	7.4	7.4	7.4	7.7	
32	0.619	33	0.619	3	0.4	0	1	0.0	<.05	3.3	0.63	7.3	7.3	7.3	7.1	
33	0.915	34	0.915	17	3	10	2	2	3.4	0.48	10.1	1.48	7.5	7.5	8.4	
34	0.7 DAY MAX	35	0.7 DAY MAX	12	2	2	2	2	1.0	0.16						

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

FINAL EFFLUENT SHEET  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669

JULY 2006

ID	PLANT#	07 MO	2006 YR	269 SPC	D A Y	FLOW	SS	CBOD	NH4	PHOS.	FECAL	pH	OXYGEN DO	CBOD % REM	SS % REM
PN	SF	MGD	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	LBS	mg/l	CT/100	SU	mg/l		
1	0.984	16	2	4.0	4.0	11	1	11.1	1.04	8.1	0.76	<20	7.3	7.6	
2	0.973	32	3	2	2	8	1	25.2	3.06	6.9	0.84	<10	7.5	7.1	
3	1.282	25	3	0	<2	0	0	3.6	0.49	4.5	0.62	<10	7.4	7.2	
4	0.988	15	2	0	<2	0	0	<2	2.8	0.38	24	7.5	7.6		
5	0.871	15	2	0	<2	0	0	<2	2.8	0.38	<10	7.5	7.7		
6	0.870	15	2	0	<2	0	0	<2	2.8	0.38	<10	7.5	7.7		
7	0.862	21	3	7	7	7	1	0.6	0.09	4.2	0.60	17	7.3	7.5	
8	0.984	21	2	7	7	0	<2	0.5	0.07	4.8	0.71	<10	7.4	7.6	
9	0.835	14	2	7	0	2	0	<2	0.5	0.07	7.2	1.08	<10	7.4	
10	0.812	13	2	0	<2	0	0	<2	0.5	0.07	7.2	1.08	<10	7.8	
11	0.793	13	2	0	<2	0	0	<2	0.4	0.06	8.4	1.20	<10	7.3	
12	0.803	13	2	0	<2	0	0	<2	0.4	0.06	8.4	1.20	<10	7.6	
13	0.840	14	2	7	1	7	1	0.4	0.06	8.4	1.20	<10	7.3	7.6	
14	0.941	15	2	8	1	0	<2	0.5	0.07	4.8	0.71	<10	7.4	7.6	
15	0.841	16	2	8	1	0	<2	0.8	0.13	4.6	0.72	<10	7.3	7.4	
16	0.945	26	4	0	<2	1	1	1.2	0.16	5.8	0.78	<10	7.5	7.3	
17	0.768	22	3	7	0	<2	0	0.8	0.11	5.2	0.75	<10	7.3	7.6	
18	0.887	14	2	0	<2	0	0	<2	0.0	<.05	5.7	0.83	<10	7.4	
19	0.828	14	2	0	<2	0	0	<2	0.0	<.05	5.7	0.83	<10	7.5	
20	0.818	14	2	0	<2	0	0	<2	0.0	<.05	5.7	0.83	<10	7.5	
21	0.897	22	3	7	1	0	<2	0.4	0.06	5.3	0.72	<10	7.3	7.6	
22	0.859	20	3	7	1	0	<2	0.4	0.06	5.3	0.72	<10	7.3	7.7	
23	0.817	24	7	1	0	<2	0	2.0	0.29	4.9	0.73	<10	7.4	7.3	
24	0.809	25	7	1	0	<2	0	0.8	0.11	4.5	0.65	<10	7.4	7.3	
25	0.823	13	2	0	<2	0	0	0.4	0.06	4.5	0.67	<10	7.5	7.8	
26	0.809	27	7	1	0	<2	0	0.4	0.06	5.3	0.72	<10	7.4	7.5	
28	0.806	29	7	1	0	<2	0	0.5	0.07	5.0	0.76	<10	7.3	7.7	
30	0.794	30	7	1	20	3	0	0	<.05	4.9	0.72	11	7.5	7.6	
31	0.813	TOT	27.126	4	1	0	<2	0	0.0	0.06	2.9	0.39	5.4	0.75	7.4
Avg	0.875	MIN	0.768	1	0	1	0	0.0	0.06	2.8	0.38	7.3	7.1	7.5	
MIN	0.768	MAX	1.282	4	20	3	25.2	3.06	8.4	1.20	7.5	7.8			
7 DAY MAX		7 DAY MAX	21	3	5					11.0					

SUPERINTENDENT'S SIGNATURE  
JACK R. DILLON

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

JUNE 2006

**FINAL EFFLUENT SHEET  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669**

ID	PLANT#	06 MO	2006 YR	269 SPC	SUPERINTENDENT'S SIGNATURE								
					D A Y	FLOW	SS	CBOD	NH4	PHOS.	FECAL	pH	
PN	310	85001	530	85002	SF	0.909	53	7	0	<2	0.9	0.12	4.8
1	0.956	29	4	0	4	0.872	29	4	0	<2	0.5	0.07	9.7
2	0.989	29	4	0	0	0.860	29	4	0	<2	0.5	0.07	7.8
3	0.872	21	3	1	3	0.850	31	4	8	1	0.4	0.05	6.5
4	0.872	21	3	1	8	0.938	31	4	8	1	0.4	0.05	6.8
5	0.860	22	3	0	0	0.879	22	3	0	<2	0.0	<0.05	6.2
6	0.850	22	3	0	0	0.968	10	0.946	27	4	1	0.5	0.08
7	0.938	21	3	0	0	0.946	11	0.821	27	4	7	1	0.4
8	0.879	21	3	0	0	0.947	12	0.870	36	5	7	1	0.6
9	0.968	21	3	0	0	0.926	13	0.818	20	3	7	1	0.05
10	0.946	21	3	0	0	0.926	14	0.845	21	3	0	<2	0.4
11	0.821	21	3	0	0	0.926	15	0.848	21	3	7	1	0.06
12	0.870	27	4	0	0	0.926	16	0.947	27	4	0	<2	4.7
13	0.818	27	4	0	0	0.926	17	0.911	33	4	8	1	0.24
14	0.845	23	3	0	0	0.926	18	0.878	15	2	7	1	0.5
15	0.848	23	3	0	0	0.926	19	0.878	15	2	7	1	0.07
16	0.947	23	3	0	0	0.926	20	0.824	27	4	0	<2	0.6
17	0.911	23	3	0	0	0.926	21	0.997	33	4	0	<2	0.8
18	0.926	31	4	8	8	0.926	22	0.911	23	3	8	1	0.10
19	0.926	31	4	8	8	0.926	23	0.857	23	3	8	1	0.09
20	0.824	27	4	0	0	0.926	24	0.824	14	2	14	2	0.14
21	0.997	33	4	0	0	0.926	25	0.864	14	2	0	<2	1.0
22	0.911	23	3	0	0	0.926	26	0.777	13	2	0	<2	0.5
23	0.857	23	3	0	0	0.926	27	0.812	27	4	0	<2	0.6
24	0.824	14	2	0	0	0.926	28	0.782	20	3	7	1	0.5
25	0.864	14	2	0	0	0.926	29	0.827	14	2	0	<2	0.07
26	0.777	13	2	0	0	0.926	30	0.887	31	0	0	0.5	5.3
27	0.812	27	4	0	0	0.926	31	0.887	31	0	0	0.07	0.73
28	0.782	20	3	0	0	0.926	31	0.887	31	0	0	0.07	0.69
29	0.827	14	2	0	0	0.926	31	0.887	31	0	0	0.07	0.69
30	0.887	31	0	0	0	0.926	31	0.887	31	0	0	0.07	0.69
TOT	26.393												
Avg	0.880	25	3	4	1	0.6	0.09	5.4	0.75	7.4	7.9		
MIN	0.777	13	2	0	1	0.0	0.05	3.7	0.57	7.2	7.4		
MAX	0.997	53	7	14	2	1.9	0.24	9.7	1.34	7.5	8.3		
7 DAY MAX	26	4	5	1	0.9	0.12							

JACK R. DILLON

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**FINAL EFFLUENT SHEET**  
**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

MAY 2006

ID	PLANT#	05 MO	2006 YR	269 SPC	SUPERINTENDENT'S SIGNATURE					
D A Y	FLOW	SS	CBOD	NH4	PHOS.	pH	OXYGEN DO mg/l	CBOD % REM	SS % REM	
PN	MGD	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	CT/100	SU	
1	0.861	36	5	7	1	0.9	0.12	4.6	0.64	<10
2	0.954	40	5	8	1	0.0	<05	4.1	0.52	19
3	0.889	37	5	7	>2	0.5	0.07	4.2	0.57	10
4	0.869	36	5	7	1	0.4	0.06	4.0	0.55	16
5	0.898	36	5	7	1	0.4	0.06	4.0	0.55	<10
6	0.912	36	5	0	>2	0.5	0.07	5.1	0.71	7.5
7	0.868	38	5	8	1	0.4	0.05	5.2	0.69	<10
8	0.906	38	5	8	0	>2	0.5	0.68	4.8	16
9	0.883	59	8	0	>2	5.0	0.68	5.0	0.56	<10
10	1.079	63	7	18	2	0.8	0.09	5.0	0.56	7.5
11	1.113	46	5	0	>2	0.6	0.06	6.0	0.65	11
12	1.084	52	6	0	>2	0.5	0.06	6.0	0.65	47
13	1.078	69	8	9	1	<0.5	5.6	0.65	7.5	8.7
14	1.033	69	7	0	>2	0.0	<0.5	6.0	0.63	11
15	1.145	67	7	0	>2	0.7	0.08	7.7	0.82	19
16	1.123	75	8	9	1	0.7	0.08	7.7	0.82	19
17	1.011	67	8	17	2	0.0	<.05	5.3	0.63	23
18	1.033	52	6	0	>2	0.5	0.06	6.0	0.70	<10
19	1.080	52	6	0	>2	0.5	0.06	6.0	0.70	<10
20	0.908	42	5	0	>2	0.9	0.11	6.0	0.72	11
21	1.002	30	4	15	2	0.8	0.11	6.5	0.86	<10
22	0.913	38	5	0	>2	0.8	0.11	5.5	0.72	<10
23	0.910	40	8	1	0	0.4	0.05	5.5	0.73	<10
24	0.904	40	5	24	3	1.0	0.12	5.1	0.63	17
25	0.965	27	1.075	37	4	2	1.4	0.15	5.8	0.62
26	1.024	28	1.115	48	6	16	1.6	0.20	5.6	0.69
27	1.075	29	0.966	31	4	0	>2	0.8	0.11	4.6
28	1.115	30	0.925	32	4	0	>2	0.9	0.11	4.7
29	0.966	31	0.963	32	4	0	>2	0.9	0.11	4.7
30	0.925	31	0.963	32	4	0	>2	0.9	0.11	4.7
31	0.963	32	0.963	32	4	0	>2	0.9	0.11	4.7
TOT	30.489									
Avg	0.984	45	5	7	1	0.9	0.13	5.3	0.66	11
MIN	0.861	8	1	0	1	0.0	0.05	4.0	0.52	10
MAX	1.145	75	8	24	3	5.0	0.68	7.7	0.86	47
7 DAY MAX	66	7	7	7	7	1.5	0.19			

JACK R. DILLON  
 SUPERINTENDENT'S SIGNATURE

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

FINAL EFFLUENT SHEET  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 027669

APRIL 2006

ID	PLANT#	MO	YR	269 SPC	CBOD	NH4	PHOS.	FECAL	pH	OXYGEN DO mg/l	CBOD % REM	SS % REM	SUPERINTENDENT'S SIGNATURE	
													JACK R. DILLON	
PN	310	85001	530	85002	650	85004								
SF														
1	0.866													
2	0.923	69	9	8	1	0.5	0.07	5.5	0.72	<10	7.6	8.9	98	80
3	0.948	40	5	16	2	0.4	0.05	4.8	0.61	<10	7.5	9.3	93	87
4	0.909	30	4	8	1	0.4	0.05	4.3	0.57	<10	7.5	9.3	96	86
5	0.886	30	4	15	2	0.6	0.08	3.8	0.52	<10	7.6	9.3	92	83
6	0.906	53	7	8	1	0.5	0.06	4.5	0.59	<10	7.7	8.8	98	88
7	0.970													
8	0.923													
9	0.855	50	7	14	2	0.9	0.12	5.3	0.75	<10	7.5	9.1	96	89
10	0.885	66	9	7	1	0.4	0.06	4.4	0.60	<10	7.4	8.5	97	84
11	0.904	75	10	8	1	0.6	0.08	5.4	0.72	<10	7.4	9.5	95	67
12	0.970	57	7	16	2	0.6	0.08	5.6	0.69	<10	7.4	9.5	95	87
13	0.947	39	5	16	2	0.6	0.08	4.6	0.58	17	7.3	9.5	96	93
14	0.974													
15	0.885													
16	0.935	47	6	8	1	0.8	0.1	3.9	0.5	13	7.3	8.9	98	85
17	0.902	38	5	0	<2			5.6	0.74	11	7.4	9.0	97	72
18	0.874	58	8	7	1	0.0	<.05	4.7	0.64	<10	7.4	9.0	100	76
19	0.869	51	7	0	<2	0.6	0.08	4.3	0.59	<10	7.4	9.1	96	84
20	0.870	36	5	7	1	0.4	0.05	4.0	0.55	<10	7.4	8.9		
21	0.863													
22	0.891													
23	0.917	46	6	0	<2	0.5	0.07	4.0	0.52	11	7.6	9.5	100	95
24	0.907	38	5	0	<2	0.7	0.09	3.9	0.51	<10	7.3	8.8	100	83
25	0.847	28	4	0	<2	0.5	0.07	3.0	0.42	<10	7.5	9.1	100	89
26	0.854	28	4	0	<2	0.4	0.05	3.3	0.46	<10	7.4	9.0	100	93
27	0.844	35	5	0	<2	0.4	0.05	2.9	0.41	<10	7.5	9.0		
28	0.815													
29	0.828													
30	0.877	37	5	0	<2	0.4	0.05	4.0	0.55					
31														
TOT		26.844												
Avg	0.895	45	6	7	1	0.5	0.07	4.4	0.58	11	7.5	9.1	97	86
Min	0.815	28	4	0	1	0.0	0.05	2.9	0.41	11	7.3	8.5		
Max	0.974	75	10	16	2	0.9	0.12	5.6	0.75	17	7.7	9.5		
7 DAY MAX		57	8	12	2	0.6	0.08							

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

MARCH 2006

**FINAL EFFLUENT SHEET**  
**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

SUPERINTENDENT'S SIGNATURE											
JACK R. DILLON											
ID	PLANT#	03 MO	2006 YR	269 SPC							
D	FLOW	SS	SS	CBOD	CBOD	NH4	PHOS.	FECAL	pH	OXYGEN	CBOD
A	MGD	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	LBS	mg/l	Do	% REM
Y	PN SF	310	85001	530	85002	650	85004			mg/l	
1	0.855	36	5	7	1	0.4	0.05	5.6	0.78	9.5	97
2	0.852	57	8	7	1	0.4	0.05	5.3	0.75	9.5	97
3	0.830								11	9.8	72
4	0.841	56	8	14	2	0.4	0.05	4.6	0.66	7.4	97
5	0.841	42	6	0	<2	0.0	<0.5	4.8	0.68	7.5	83
6	0.838	42	6	0	<2	0.4	0.05	4.7	0.67	10	86
7	0.842	42	6	0	<2	0.4	0.05	4.9	0.67	<10	78
8	0.873	44	6	0	<2	0.4	0.05	5.5	0.64	11	83
9	1.038	69	8	0	<2	0.4	0.05			100	79
10	1.126								<10	7.3	79
11	1.114									8.7	
12	1.149	57	6			1.8	0.19	9.0	0.94		
13	1.557	104	8	0	<2	0.9	0.07	8.2	0.63	<10	
14	1.236	72	7	10	1	0.6	0.06	5.3	0.51	<10	
15	1.106	37	4	0	<2	0.6	0.06	4.6	0.50	<10	
16	1.063	44	5	0	<2	0.9	0.10	4.4	0.50	<10	
17	1.067									7.6	
18	1.000									9.8	
19	0.901	30	4	0	<2	0.5	0.06	4.7	0.62		
20	0.943	31	4	0	<2	0.0	<.05	7.2	0.91	<10	
21	0.929	46	6	23	3	0.4	0.05	6.6	0.85	<10	
22	0.902	45	6	0	<2	0.5	0.06	4.5	0.60	<10	
23	0.912	30	4	15	2	0.5	0.07	5.2	0.68	<10	
24	0.936									7.4	
25	0.892									10.4	
26	0.887	44	6	0	<2	0.7	0.09	4.8	0.65		
27	0.895	45	6	0	<2	0.6	0.08	4.0	0.54	<10	
28	0.902	38	5	15	2	0.5	0.06	4.2	0.56	<10	
29	0.874	22	3	0	<2	0.4	0.06	4.1	0.56	<10	
30	0.893	22	3	0	<2	0.4	0.05	4.3	0.58	<10	
31	0.903									7.3	
TOT	29.997									7.5	9.1
AVG	0.968	46	6	4	2	0.5	0.07	5.3	0.66	11	9.7
MIN	0.830	22	3	0	1	0.0	0.05	4.0	0.50	10	7.3
MAX	1.557	104	8	23	3	1.8	0.19	9.0	0.94	23	7.6
7 DAY MAX	63	7	9	2	10					10.5	100

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**FINAL EFFLUENT SHEET**  
**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

FEBRUARY 2006

ID	PLANT#	02 MO	2006 YR	269 SPC	SUPERINTENDENT'S SIGNATURE											
					D A Y	FLOW	SS	CBOD	NH4	PHOS.	FECAL	pH	OXYGEN DO mg/l	CBOD % REM	SS % REM	
PN	SF	310	85001	530	85002	650	85004									
	1	0.986	42	5	17	2	0.8	0.10	3.9	0.47	<10	7.5	9.2	93	86	
	2	0.983	49	6	16	2	0.4	0.05	4.3	0.52	<10	11	7.4	96	90	
	3	1.027											9.1			
	4	1.215														
	5	1.059	53	6	18	2	1.1	0.13	4.5	0.51				97	95	
	6	1.062	44	5	9	1	0.4	0.05	4.3	0.49	12	7.4	9.6	97	88	
	7	0.975	49	6	0	<2	0.7	0.08	4.0	0.49	16	7.4	9.9	100	85	
	8	0.944	31	4	0	<2	0.4	0.05	4.2	0.53	<10	7.4	9.1	100	89	
	9	0.896	37	5	0	<2	0.5	0.07	4.3	0.58	<20	7.5	10.0	100	83	
	10	0.951														
	11	0.903														
	12	0.834	21	3				0.0	<.05	3.8	0.54					
	13	0.869	29	4				0.6	0.08	4.2	0.58	13	7.5	9.5	96	
	14	0.858	43	6	0	<2	0.4	0.06	4.1	0.57	13	7.5	10.3	100	81	
	15	0.969	57	7	0	<2	0.0	<.05	4.7	0.58	<10	11	7.5	9.8	100	
	16	1.512	202	16	13	1	0.9	0.07	13.5	1.07	<20	7.3	9.4	97	59	
	17	1.518														
	18	1.150														
	19	1.019	68	8	0	<2	0.8	0.09	4.5	0.53				100	74	
	20	0.959	56	7	8	1	0.5	0.06	4.1	0.51	21	7.6	10.1	97	79	
	21	0.979	57	7	0	<2	0.6	0.07	4.2	0.52	15	7.5	9.2	100	72	
	22	0.988	49	6	0	<2	0.7	0.09	4.4	0.53	<10	7.5	9.7	100	81	
	23	0.979	33	4	0	<2	0.4	0.05	4.1	0.5	16	7.4	9.7	100	85	
	24	1.049														
	25	0.939														
	26	0.880	51	7	0	<2	0.4	0.05	4.7	0.64				100	85	
	27	0.914	46	6	0	<2	0.6	0.08	5.0	0.65	31	7.4	9.9	100	83	
	28	0.863	94	13	7	1	0.0	<.05	6.5	0.90	15	7.4	9.8	98	50	
	29															
	30															
	31															
	TOT	28290														
Avg		1.010	56	7	5	1	0.5	0.07	4.9	0.59	11	7.4	9.7	99	82	
Min		0.834	21	3	0	<2	0.0	0.05	3.8	0.47	<10	7.3	9.1	93	50	
Max		1.518	202	16	18	2	1.1	0.13	13.5	1.07	31	7.6	10.3	100	96	
7 DAY MAX		71	7	7	1	0.6	0.08						13			

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**FINAL EFFLUENT SHEET**  
**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

**JANUARY 2006**

ID	PLANT#	01 MO	2006 YR	269 SPC	SUPERINTENDENT'S SIGNATURE										
					D A Y	FLOW	SS	CBOD	NH4	PHOS.	FECAL	pH	OXYGEN DO mg/l	CBOD % REM	SS % REM
PN	SF	mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	LBS.	mg/l	CT100	SU			
1	0.890	45	6	0	<2	0.8	0.09	5.4	0.60	7.3	7.3	100	87		
2	1.001	58	7	0	<2	0.4	0.05	4.6	0.57	<10	7.3	100	85		
3	0.974	65	8	0	<2	0.4	0.05	3.7	0.47	<20	7.5	100	89		
4	0.932	47	6	0	<2	0.4	0.06	3.9	0.53	<10	7.5	100	82		
5	0.881	29	4	0	<2	0.4	0.06	3.9	0.53	<10	7.6	10.1	88		
6	0.856	7	0.836	35	5	0	<2	0.0	<.05	4.3	0.62	<10	100		
8	0.832	41	6	0	<2	0.3	0.05	4.2	0.62	<10	7.5	9.3	93		
9	0.816	41	6	7	1	0.3	0.05	4.1	0.62	<10	7.5	9.6	86		
10	0.816	35	5	0	<2	0.3	0.05	4.0	0.59	<10	7.4	9.4	100		
11	0.833	35	5	0	<2	0.3	0.05	4.0	0.58	<10	7.6	9.3	83		
12	0.832	35	5	0	<2	0.5	0.05	4.0	0.58	<10	7.4	9.1	92		
13	1.195	41	5	0	<2	0.4	0.05	3.8	0.53	<10	7.5	9.0	86		
14	1.050	43	6	0	<2	0.4	0.05	3.8	0.51	21	7.4	9.0	89		
15	0.865	30	4	0	<0	0.0	<.05	3.8	0.51	<10	7.5	8.9	100		
16	0.902	45	5	0	<2	0.5	0.06	4.6	0.52	11	7.5	9.0	34		
17	1.070	154	19	24	3	0.0	<.05	4.1	0.50	25	7.4	9.5	100		
18	0.972	44	6	0	<2	0.4	0.05	4.4	0.54	<10	7.5	9.0	86		
19	0.979	64	9	0	<2	0.8	0.11	4.0	0.56	14	7.4	9.4	88		
20	1.183	5	0	<2	0.5	0.06	4.1	0.48	<10	7.5	9.0	100			
21	1.096	39	5	0	<2	0.4	0.05	4.3	0.55	21	7.4	9.4	90		
22	0.947	49	6	0	<2	0.4	0.05	4.8	0.59	<10	7.4	9.4	88		
23	0.985	46	6	0	<2	0.0	<.05	3.3	0.43	<10	7.4	9.4	93		
24	0.911	44	6	0	<2	0.0	<.05	4.4	0.60	<10	7.4	10.0	89		
25	0.889	64	9	0	<2	0.8	0.11	4.0	0.56	20	7.6	9.8	100		
26	0.850	27	0.918	1.015	76	7	0	<2	0.5	0.05	23	7.4	8.6	90	
28	1.297	55	6	0	<2	1.0	0.11	4.6	0.50	<10	7.5	9.4	100		
29	1.099	34	4	0	<2	0.5	0.06	4.1	0.48	13	7.5	9.3	86		
30	1.012	146	4	2	0.4	0.06	4.4	0.56	3.3	0.43	<10	7.3	8.6		
31	1.096	29	4	0	1	0.0	<.05	3.3	0.43	25	7.6	10.1			
TOT															
Avg	0.959	50	6	1	2	0.4	0.06	4.4	0.56	13	7.5	9.3	99.8		
MIN	0.816	29	4	0	1	0.0	<.05	3.3	0.43	25	7.6	10.1			
MAX	1.297	154	19	24	3	1.0	0.11	7.5	0.69	100	91	94			
7 DAY MAX		63	8	6	2	0.5	0.06								

JACK R. DILLON

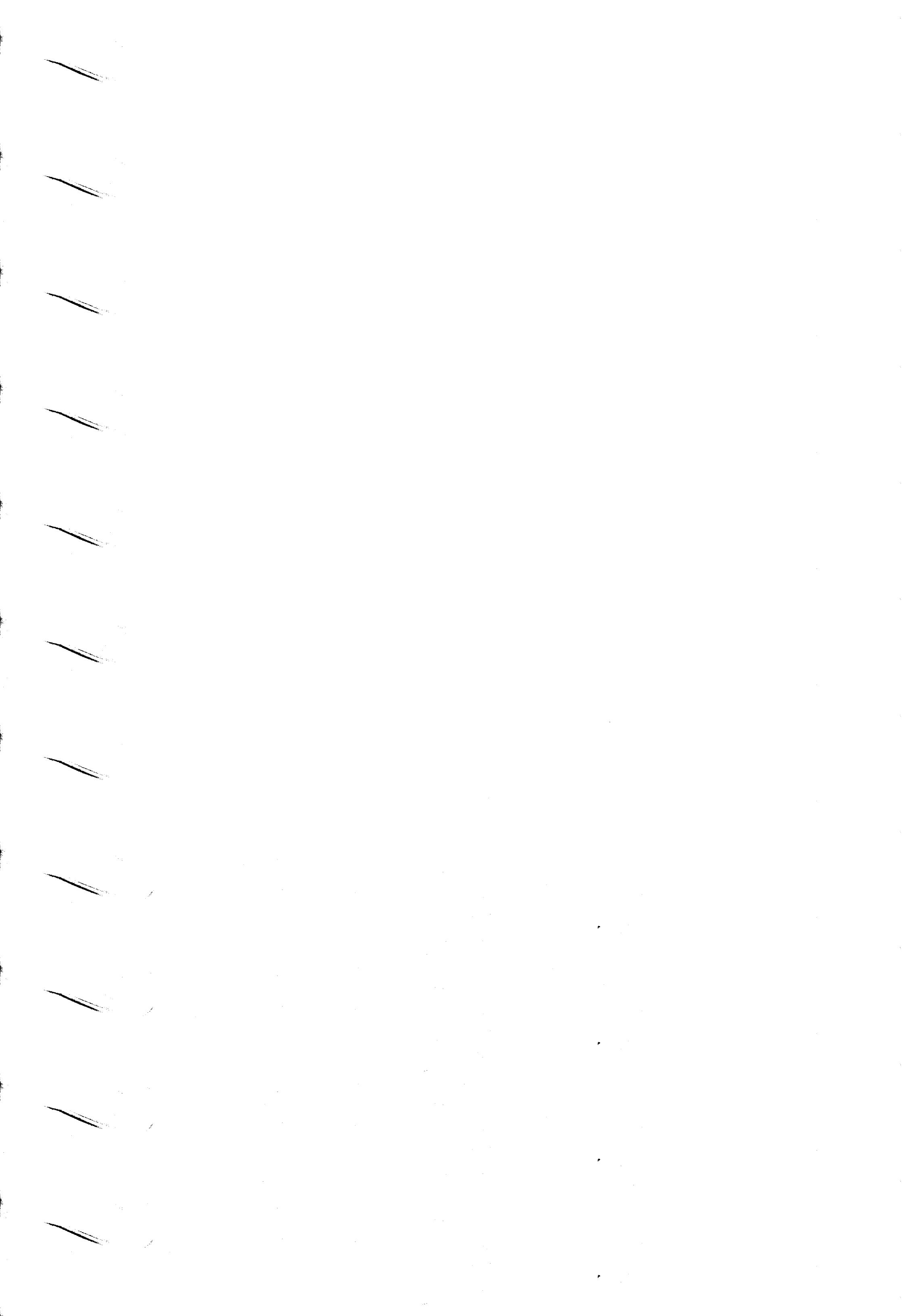
**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

JANUARY 2007

**ROLLIN-WOODSTOCK WWTR**  
**ADDISON MI. 49220**  
**PERMIT # 0027665**

**SUPERINTENDENT'S SIGNATURE**  
**JACK R. DILLON**

S SIGNATURE



STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

SEPTAGE TESTING  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669

OCT. 2006

ID	PLANT#	MO	YR	SPC	SEPTAGE						PN	SF						
					D	A	SEPTAGE	BOD 5	SOL BOD	TSS	SVS	TS	TOTAL P	ORTHOP	pH	TKN	TOTALK.	NH4
															mg/l	mg/l	mg/l	mg/l
1					2	3	4	5	6	7	8	9						
10																		
11					12	4500	1320	137	4010	2970	0.77	47.3	3.7	7.3		1060	72.9	
12					13	2000												
13					14													
14					15													
15					16	5200	2820	202	12200	8600	1.47	81.3	10.4	7.3		800	76.0	
16					17	3000	6400	130	15000	11800	1.64	71.3	5.2	7.9		1070	76.6	
17					18	7500												
18					19	5000												
19					20	3000												
20					21													
21					22													
22					23	5600	7400	220	21080	15480	1.78	112.5	6.4	7.1		960	75.6	
23					24	5000	5300	260	11360	9000	1.23	66.9	10.0	7.4		480	1110	
24					25	7000											115.6	
25					26	4500											1730	264.0
26					27	6400												
27					28													
28					29													
29					30	6000	1213	112	3700	2720	0.51	22.5	5.1	7.2		460	700	
30					31	3000												
31					TOT	67700												
					Avg	4836	4076	173	14254	10126	1.77	95.3	10.5	7.4		470	1061	103.5
					MIN	2000	1213	112	3700	2720	0.51	22.5	3.7	7.1		700	43.6	
					MAX	7500	7400	260	34600	21440	4.09	265.6	36.4	7.9		1730	264.0	

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**SEPTAGE TESTING**  
**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027869**

NOVEMBER 2006

ID	PLANT#	460150	11	2006	269	SPC	SEPTAGE			pH	TKN mg/l	TOT ALK. mg/l	NH4 mg/l		
							D A Y	SEPTAGE	BOD5	SOL BOD	TSS	SVS	TS	TOTAL P	ORTHO P
								gals.	mg/l	mg/l	mg/l	% solids	mg/l	mg/l	
PN SF	1	6000	4800	315	18400	13260	1.95	22.5	7.7	6.8	870	82			
	2	6000	3200	126	15278	9074	1.79	21.0	10.0	7.2		82			
	3	6000													
	4														
	5														
	6	6000	4400	355	11160	8400	1.44	99.6	14.9	6.7	460	890			
	7	6000	2300	175	14440	8042	1.15	106.9	14.3	7.5		1090			
	8	6000													
	9	6000													
	10														
	11														
	12														
	13	6000	1380	225	5330	4274	0.74	46.5	9.8	7.1		710			
	14	5700	7300	385	11658	11658	1.98	93.8	93.8	7.0	620	1000	444		
	15	5600													
	16	5800	4800	225	14016	9720	1.79	131.3	7.5	7.1		1120	86		
	17														
	18	4000													
	19	5600													
	20	5600	4100	260	11518	11846	1.19	75.3	13.6	6.8	980	84.8			
	21	4800	2400	135	20754		2.14	313.1	5.5	7.2	680	1780	86.6		
	22	5000													
	23														
	24	3000													
	25														
	26														
	27	8700	4025	167	14448	10360	1.35	173.4	3.0	7.0	350	570	63.6		
	28	3000													
	29	2500	3975	220											
	30	8600	2400	138	18340	10140	1.05	40.0	12.8						
	31														
<b>TOT</b>		115900													
Avg	5519	3757	227	14554	9992	1.71	102.1	9.9	7.0	528	1001	132.7			
Min	2500	1380	126	5330	4274	0.74	21.0	3.0	6.7		570	63.6			
Max	8700	7300	385	20754	13260	2.63	313.1	14.9	7.5		1780	444.0			

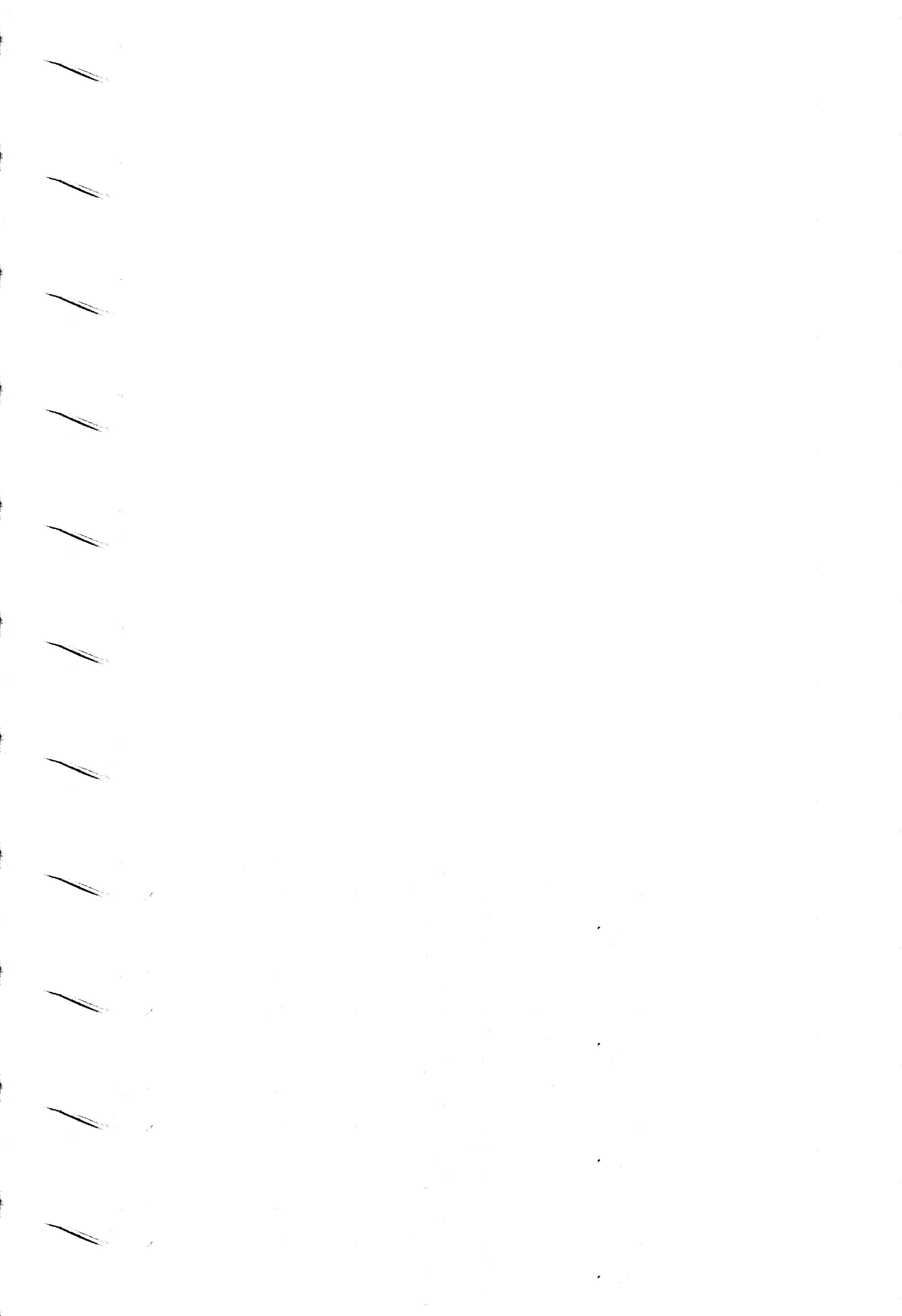
STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669

ID	PLANT#	460150	12	2006	SPC	269	SEPTAGE			TOTAL P	ORTHOP	pH	TKN mg/l	TOT ALK mg/l	TS % VOL.	NH4 mg/l
							D A Y	SEPTAGE	BCD 5	SOL BOD	TSS	SVS	TS	% solids	mg/l	
1																
2																
3																
4	5300	3025	68	9320	6094	1.12	70.2	10.7	7.0	990	60	58				
5	5600	2700	>365	7730	3063	0.92	47.3	11.6	6.8	740	72	58				
6	5600															
7	5800	2900	335	9878	6644	1.61	88.9	3.5	7.4	890	43	147				
8	5500															
9																
10																
11	9000	2330	180	9742	6102	1.13	114	9.8	7.3	820	59	104.6				
12	8600	4100	230	15520	9520	2.52	129.1	6.9	7.2	440	960	41				
13	5000															
14	4500	6100	170	41880	19840	4.80	356.3	8.1	7.2							
15	7200															
16																
17																
18	7000	5900	>380	19556	15506	2.07	195.3	24.2	6.9	590	68	130				
19	4700	3025	>390	9934	7976	1.24	102.3				77	268				
20																
21																
22																
23																
24																
25																
26	6000	3600		31882		3.75	55.3	4.4								
27	3000			16232	12018	2.41										
28	5000															
29	3000															
30																
31																
TOT		100600														
Avg	5589	3742	197	17361	9991	2.08	128.7	9.9	7.1	943	880	60	121.5			
Min	3000	2330	68	7730	3063	0.74	47.3	3.5	6.8	440	740	41	58.0			
Max	9000	6100	335	41880	19840	4.80	356.3	24.2	7.4	1800	990	77	268.0			

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**SEPTAGE TESTING**  
**ROLLIN-WOODSTOCK W**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**



## SEPTAGE TESTING

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 48220  
PERMIT # 0027669

OCT.

ID 460150 10 2006 SPC 269

PLANT# MO YR

## SUPERNATE

D	BOD <sub>5</sub>	SOL BOD	TSS	SVS	TS	TOTAL P	ORTHOP	TKN	pH	TOT ALK.	GALLONS	NH4
A	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l				mg/l
Y	PN	SF										
1	2	3	4	5	6	7	8	9	10	11	12	13
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30	7	<3	18	16	0.16	0.62	0.21		7.3	148	8600	0.06
31	8	<3	15	11	0.22	0.56	0.22	3.1	6.6	150	8600	17200
TOT												
Avg	7.5	<3	17	14	0.19	0.59	0.22	3.1	7.0	149	8600	0.06
Min	7.0	0.0	15	11	0.16	0.56	0.21		6.6	148	8600	0.06
Max	8.0	0.0	18	16	0.22	0.62	0.22	7.3	150	150	8600	0.06

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

SEPTAGE TESTING  
 ROLLIN-WOODSTOCK WWTP  
 ADDISON MI 49220  
 PERMIT # 0027669

NOV. 2006

ID D A Y	PLANT# 460150	MO 10	YR 2006	SPC 269	SUPERNATE			TOTAL P mg/l	ORTHOPHOSPHATE mg/l	pH	TOT ALK. GALLONS	TKN mg/l	NH4 mg/l
					BOD5	SOL BOD	TSS	SVS	TS				
1	5	2	15	11	0.14	0.66	0.38	6.5	160	8650	7930	7930	
2	5	<4	21	12	0.16	0.69	0.42	7.3					
3													
4													
5	6	<3	6	6	0.15	0.61	0.41	7.1					
6	7	16	4	35	0.15	1.30	0.49						
7	8	10	3	26	0.18	1.00	0.56	7.9					
8													
9													
10													
11													
12													
13	11	<3	24	8	0.17	1.05	0.61	7.2					
14	5	<3	8	0.11	0.96	0.36							
15													
16	8	<3	36	28	0.19	1.20	0.72	7.2					
17													
18													
19													
20	11	<3	45	12	0.22	1.60	0.98	7.3					
21	9	5	12		0.85	0.72	7.3	174					
22								160					
23													
24													
25													
26													
27	12	6	19	13	0.30	1.10	0.55	7.2					
28													
29													
30													
31													
<b>TOT</b>											83370		
Avg	9.1	<3	22	14	0.18	1.00	0.56	7.2					0.62
Min	5.0	2.0	6	6	0.11	0.61	0.36	6.5					0.34
Max	16.0	6.0	45	28	0.30	1.60	0.98	7.9					0.92

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**SEPTAGE TESTING**  
**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI 49220**  
**PERMIT # 0027669**

DEC. 2006

ID	PLANT#	460150	12	2006	SPC	269	<b>SUPERNATE</b>			pH	TOT ALK. GALLONS	TKN	NH4 mg/l	
							D A Y	BOD 5 mg/l	SOL BOD mg/l	TSS mg/l	SVS mg/l	TS %	TOTAL P mg/l	ORTHOP mg/l
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
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18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
<b>TOT</b>													92660	
<b>Avg</b>	9.8	<3		19		13		0.24	0.85	0.33	7.4	141	8424	0.72
<b>Min</b>	7.0	3.0		13		9		0.22	0.36	0.26	7.2	104	2400	0.09
<b>Max</b>	14.0	12.0		26		16		0.29	1.77	0.51	7.7	200	15500	3.09

**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

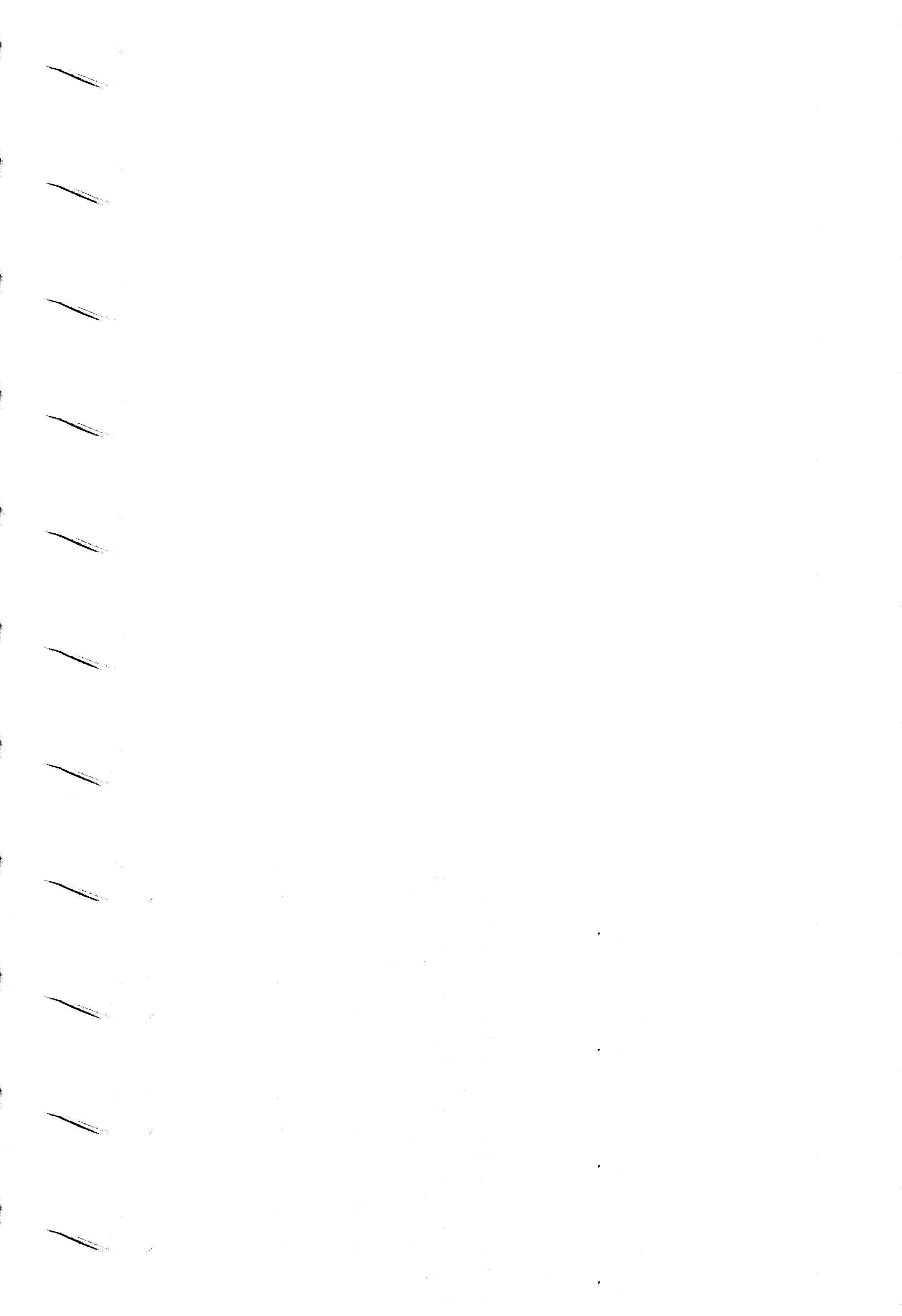
**SEPTAGE TESTING**

**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

**PERMIT # 0027669**  
**ADDISON MI. 49220**  
**ROLLIN-WOODSTOCK WWTP**  
**SEPTAGE TESTING**

100

ID	PLANT#	MO	2007	SPC	269	SUPERNATE						TOT ALK. GALLONS	TKN	NH4 mg/l	
						D A Y	BOD 5 mg/l	SOL BOD mg/l	TSS mg/l	SVS mg/l	TS %	TOTAL P mg/l	ORTHOP mg/l	pH	mg/l
1	460150	01													
2															
3	10	4	16	12	0.22	1.28	0.43	7.4	292	14700				0.44	
4	21	4	41	29	0.21	1.16	0.55	7.1	278	1400				2.02	
5															
6															
7															
8	11	6	34	23	0.19	1.06	0.44	7.3	192	4800				0.25	
9	10	7	20	0.21	0.96	0.63	7.4	210	6200		1.5			0.31	
10															
11	<5	<3	12	8	0.25	0.64		7.3	184	5800				0.1	
12															
13															
14															
15															
16	36	8	94	66	0.22	2.45	1.10	7.2		15400					
17															
18	9	<3	23	15	0.13	0.74	0.30	7.6	184	37000	11.0			3.12	
19															
20															
21	9	<3	46	30	0.22	0.98	0.61	7.2		218	1500			0.16	
22															
23															
24	9	<3	38	26	0.15	1.08	0.39	7.5		178	28500			<.05	
25	10	4	20	0.20	0.68	0.60	7.4		202	6800				0.15	
26															
27															
28															
29	6	<3	10	9	0.19	0.48	0.20	7.4		210	2000			<.05	
30															
31															
TOT															
Avg	13	<3	32	24	0.20	1.05	0.53	7.3		215	9992			0.82	
Min	<5	<3	10	8	0.13	0.48	0.20	7.1		178	1400			0.10	
Max	36	8.0	94	66	0.25	2.45	1.10	7.6			292				3.12



STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

ID	OCT.	WAS			GAL.	D A Y
		TSS	TVSS	TS		
	mg/l	mg/l	%	%	% VOL.	
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				
0						
38200						
TOT						
15791	10845	1.77	62	2729		Avg
4200	2700	0.59	59	0		Min
25950	19550	2.69	67	21650		Max

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

NOV. 2006

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366670 22900 3.2 61 470

30800 19300 3.05 63 560

28357 17767 382 61 500

17600 11100 2.20 60 470

366670 22900 3.20 63 560

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

DEC. 2006

ID

WAS				D			
TSS	TVSS	TS	GAL.	A	Y		
mg/l	mg/l	%	% VOL.	PN	SF		
23600	14970	3.2	64	1	2		
21990	14310	3.1	63	3	4		
				1600	2100		
				2000	2000		
				400	400		
20960	14450	3.0	64	6	7		
26950	18530	1.07	57	7	8		
				10	9		
				1800	1800		
				2000	2000		
6870	4490	3.0	60	11	12		
5400	3500	0.7	63	12	13		
780	500	1.07	57	13	14		
				3000	3000		
				15	15		
				16	16		
11460	7400	1.5	63	17	18		
		1.4	67	18	19		
		0.90	63	19	20		
		0.91	55	20	21		
				2500	2500		
				3100	3100		
				2500	2500		
				2000	2000		
				25	25		
				26	26		
				27	27		
				28	28		
				29	29		
				30	30		
				31	31		
30800	19300	3.05	63	29400	29400	TOT	
				2100	2100	Avg	
16524	10828	1.98	62	400	400	MIN	
780	500	0.70	55	3100	3100	MAX	
30800	19300	3.20	67				

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

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JAN. 2007

PN  
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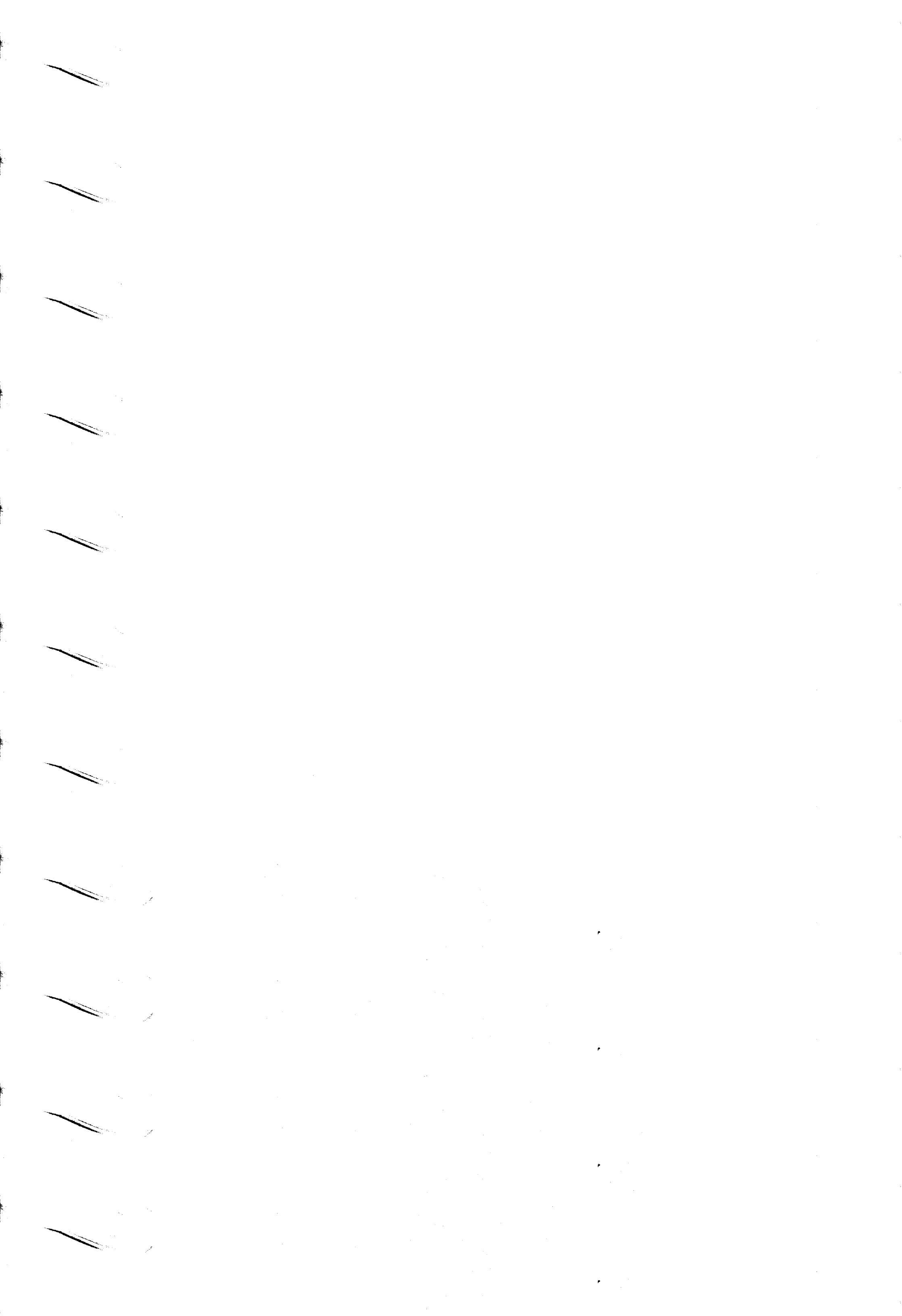
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2	3	4	5	6	7	8	9	10
8370	5580	0.9	66	3000				
10640	6960	1.2	65	2000				
9670	6360	1.2	65	2000				
2050	1781	1.2	60	2000				

6440	4990	1.2	62	2000
		1.0	62	2000

23  
24  
25  
26  
27  
28  
29  
30  
31

	TOT	AVG	MIN	MAX
7822	5134	1.13	64	2143
2050	1781	0.90	60	2000
10640	6960	1.20	67	3000



**STATE OF MICHIGAN**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**SEPTAGE TESTING**

**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

**ROLLIN-WOODSTOCK WWTP**  
**ADDISON MI. 49220**  
**PERMIT # 0027669**

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

DIGESTERS	#1	D	PN						
% SOLIDS	% VOL.	D.O.	pH	TALK	TEMP.	AIR	A	Y	SF
			mg/l	o C	SCFS				

	TOT	AVG	MIN	MAX
1.6	62	6.0	7.0	789
1.3	61	1.3	6.6	590
1.0	65	0.5	7.2	1022

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY

SEPTAGE TESTING  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669

NOV. 2006

DIGESTERS		#1 % SOLIDS mg/l	#1 % VOL.	D.O.	pH	TALK	TEMP. °C	AIR SCFS	% SOLIDS #2 % VOL.	D.O.	pH	TALK	TEMP. °C	AIR SCFS	PN SF	D A Y	
1.3	63	9.2	7.1	580	17	190	1.9	63	5.5	6.9	760	13	95	1			
		7.5			16	190			5.1			13	100	2			
1.4	62	8.8	7.4	700	15	192	1.97	61	6.7	7.1	1080	12	114	3			
														4			
1.7	60	8.3	7.3	660	16	200	2.4	61	7.4		960	12	125	6			
		7.5			17	176			6.6			13	138	7			
1.5	61	7.0	7.3	690	18	187	2.7	62	5.8	7.4	1250	13	130	8			
		6.8			19	180			6.3			13	137	9			
1.7	61	9.7	7.2	570	15	184	2.7	62	6.5	6.8	880	13	120	12			
		8.8			16	232			5.3			13	134	14			
1.4	57	7.2	6.9	440	16	217	2.5	62	7.2	7.0	840	14	144	15			
		7.7			17	193			8.2			14	150	16			
		7.4			16	238			7.4			13	120	17			
1.6	54	5.7	6.8	450	16	211	2.8		5.0	6.9		730	13	140	19		
		8.0			16	226			6.9			12	148	20			
1.6	55	8.7	7.0	770	16	220	2.8	62	6.1	7.0	990	13	130	21			
														22			
														23			
														24			
1.8	54	7.8	7.1		17	206	2.7	59	7.5	7.0				25			
		8.3			18	230			6.4					26			
1.8	56	8.7	7.0		19	232	2.7	60	5.7	6.9				28			
		7.3			20	230			4.6					29			
														30			
														31			
														TOT			
1.6	58	7.9	7.1	637	17	207	2.5	61	6.3	7.0	938	13	129	Avg			
														12	95	MIN	
1.3	54	5.7	6.8	440	15	176	1.9	59	4.6	6.8	730	12					
														16	122	MAX	
1.8	63	9.7	7.4	870	20	238	2.8	63	8.2	7.4	1260	17	150				

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**SEPTAGE TESTING**  
ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669

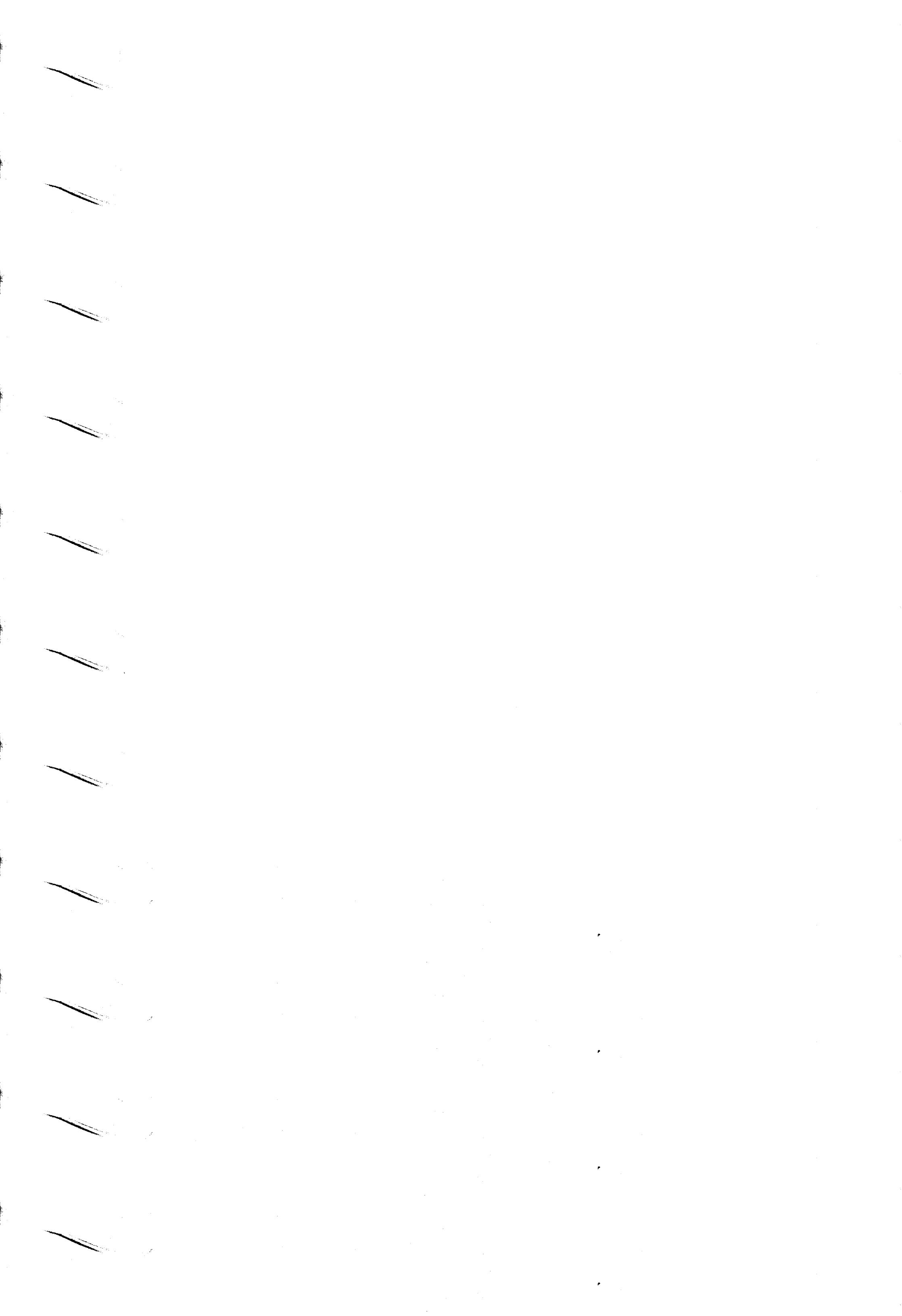
DEC. 2006

DIGESTERS		#1		#2		DIGESTERS		SF				
% SOLIDS	% VOL.	D.O.	pH	TALK	TEMP.	AIR	D.O.	pH	TALK	TEMP.	AIR	
mg/l				o C	SCFS		% VOL.					
1.5	63	8.8	6.8	480	15	210	2.6	63	8.5	6.9	930	11
		8.8			13	197			8.0	10.2		170
1.4	63	10.2	6.2	520	12	228	3.1	64	10.2	6.9	1120	10
		9.7			11	203			10.2			162
1.7	54	6.8	6.9	630	10		1.9	64	5.4	6.9	1020	9
												123
2.0	52	9.9	6.7	590	10	178	3.0	55	9.5	880	7	150
		9.0			11	212			9.2			150
1.6	54	9.2	6.9	740	12	210	3.0	55	6.5	860	10	8
	1.1	58			11	210			5.2			8
1.9	47	9.2	7.0	530	16	210	3.1	64	6.4	7.1	1000	12
		7.6			15	213			7.7			12
		8.4			15	216			6.8			131
		8.4	7.0	750	14	206			0.5	5.8	880	9
												146
1.5	46	11.0	7.2	700	12	184	2.5	60	7.0	6.8	900	11
	58	7.5			11	216	2.5	58	7.2			95
1.7	52	7.3	7.3	1000	15	228	2.6	61	10.4			98
												130
1.6	55	8.8	6.9	689	13	208	2.7	61	7.4	6.8	949	10
1.1	46	6.8	6.2	480	10	178	1.9	55	0.5	5.8	860	7
2.0	62	11.0	7.3	1000	16	228	3.1	64	10.4	7.1	1120	12

**STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

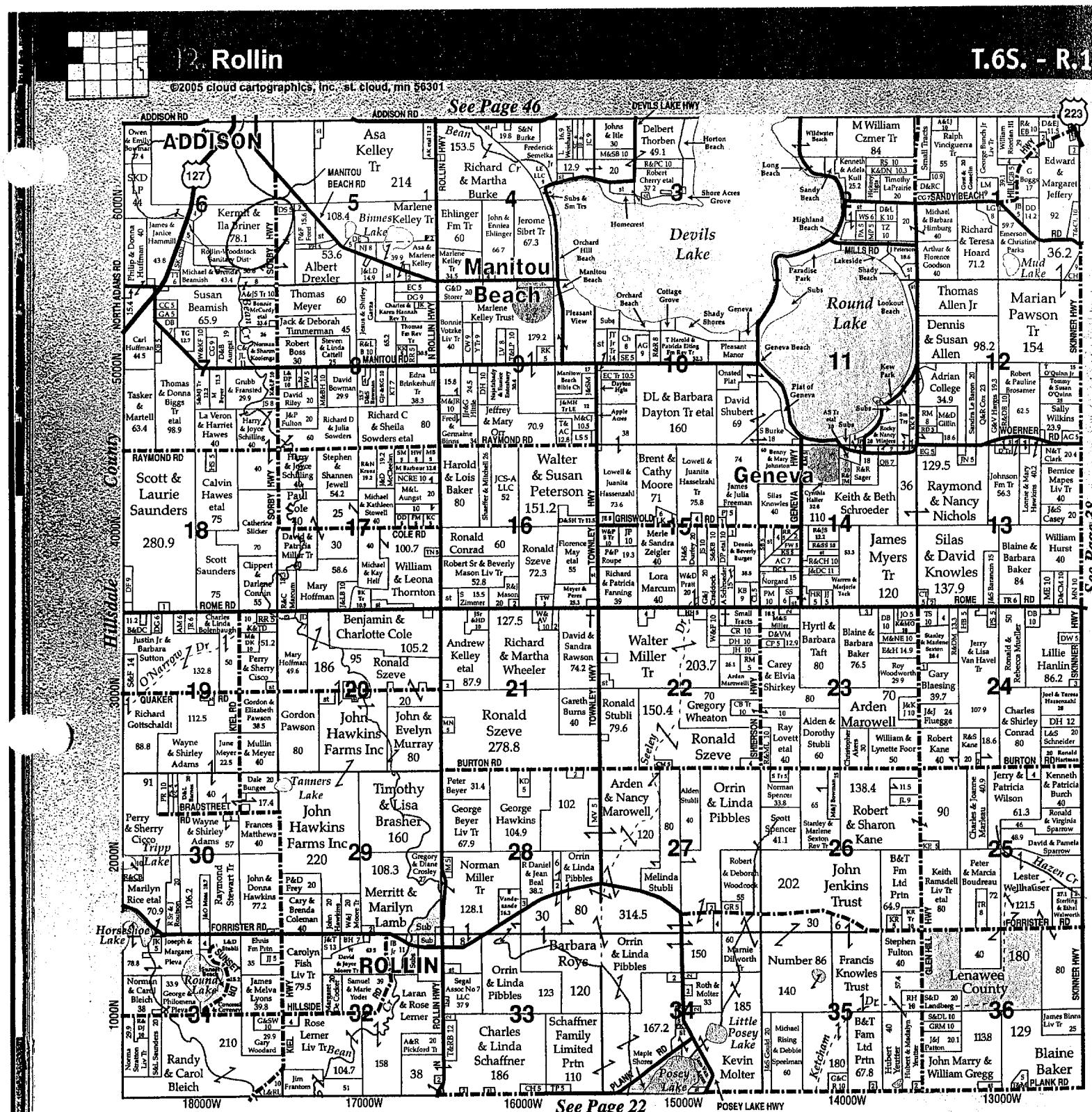
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ROLLIN-WOODSTOCK WWTP  
ADDISON MI. 49220  
PERMIT # 0027669

IAN 2007 2006



# Rollin

T.6S. - R.1



See Page 38

Lenawee, MI

36

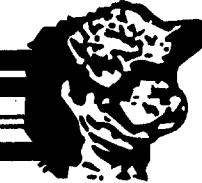
**FRIENDLY HOME PARTY'S INC.**

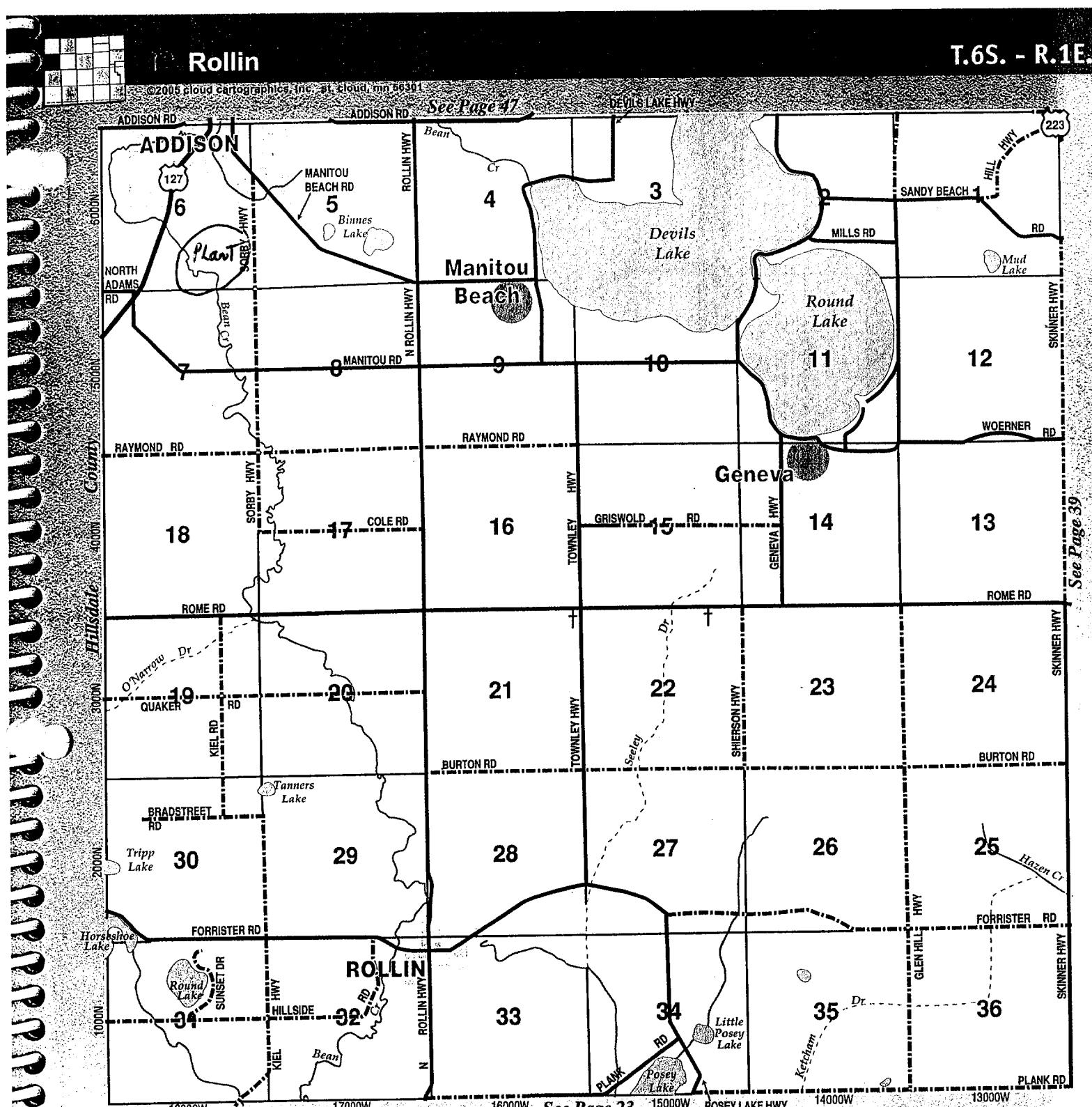
Dorothy Sinclair  
(517) 486-3506  
(888) 519-8500  
3260 Payne Hwy., Blissfield, MI 49228

**SCHOLL'S SLAUGHTER HOUSE**  
CUSTOM KILL & PROCESSING FREEZER BEEF

1305 Piottor Highway  
Blissfield, MI 49228  
Phone: Deerfield - (517) 447-3174

Monday, Tuesday, Wednesday & Friday - 8am to 5pm  
Thursday - Slaughter Only  
Saturday - 11am to 12 pm





Rock Riding  
Leader  
Sources

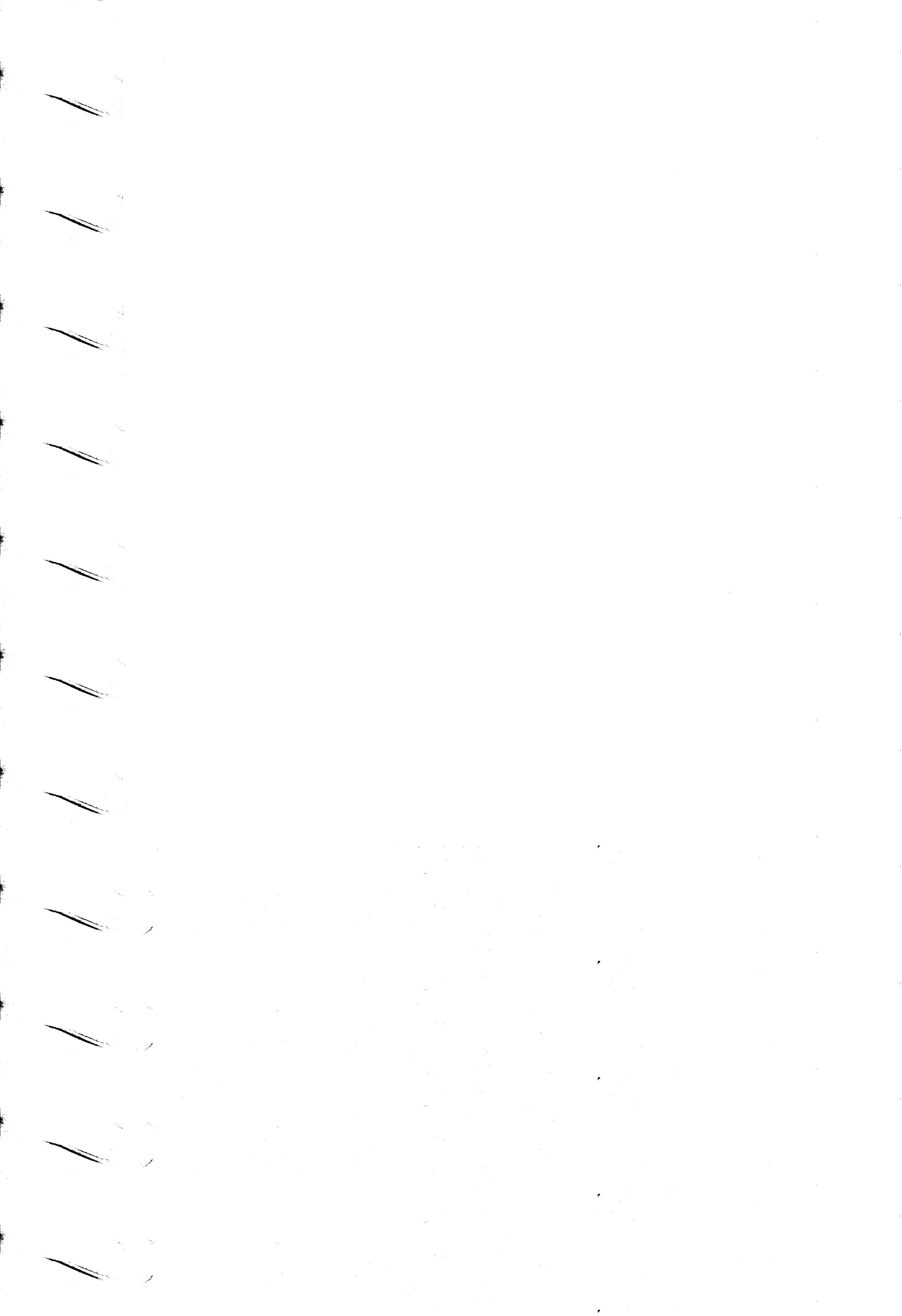
• Horticulture  
• Livestock  
• Family  
Education • Paper

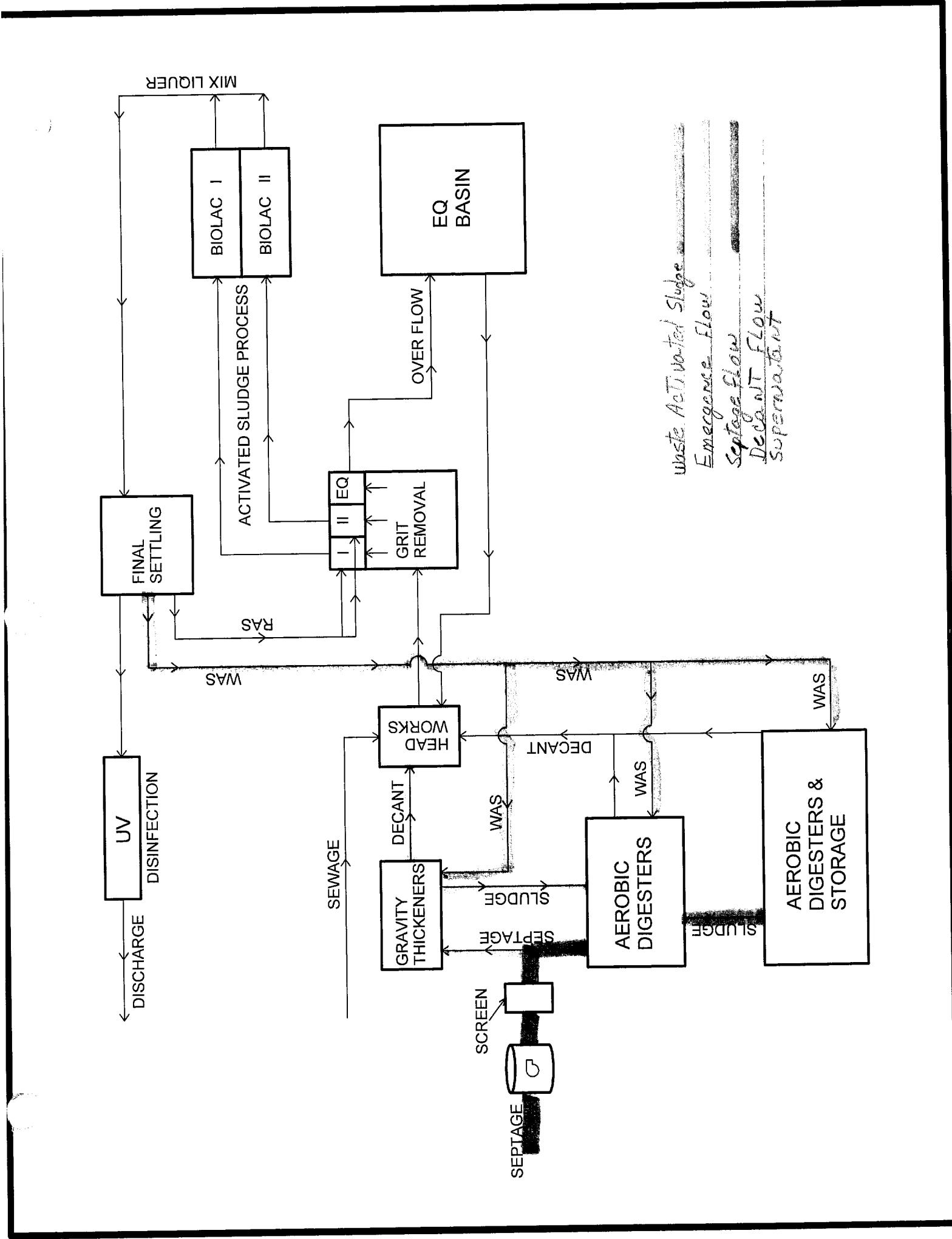
Who can join 4-H?

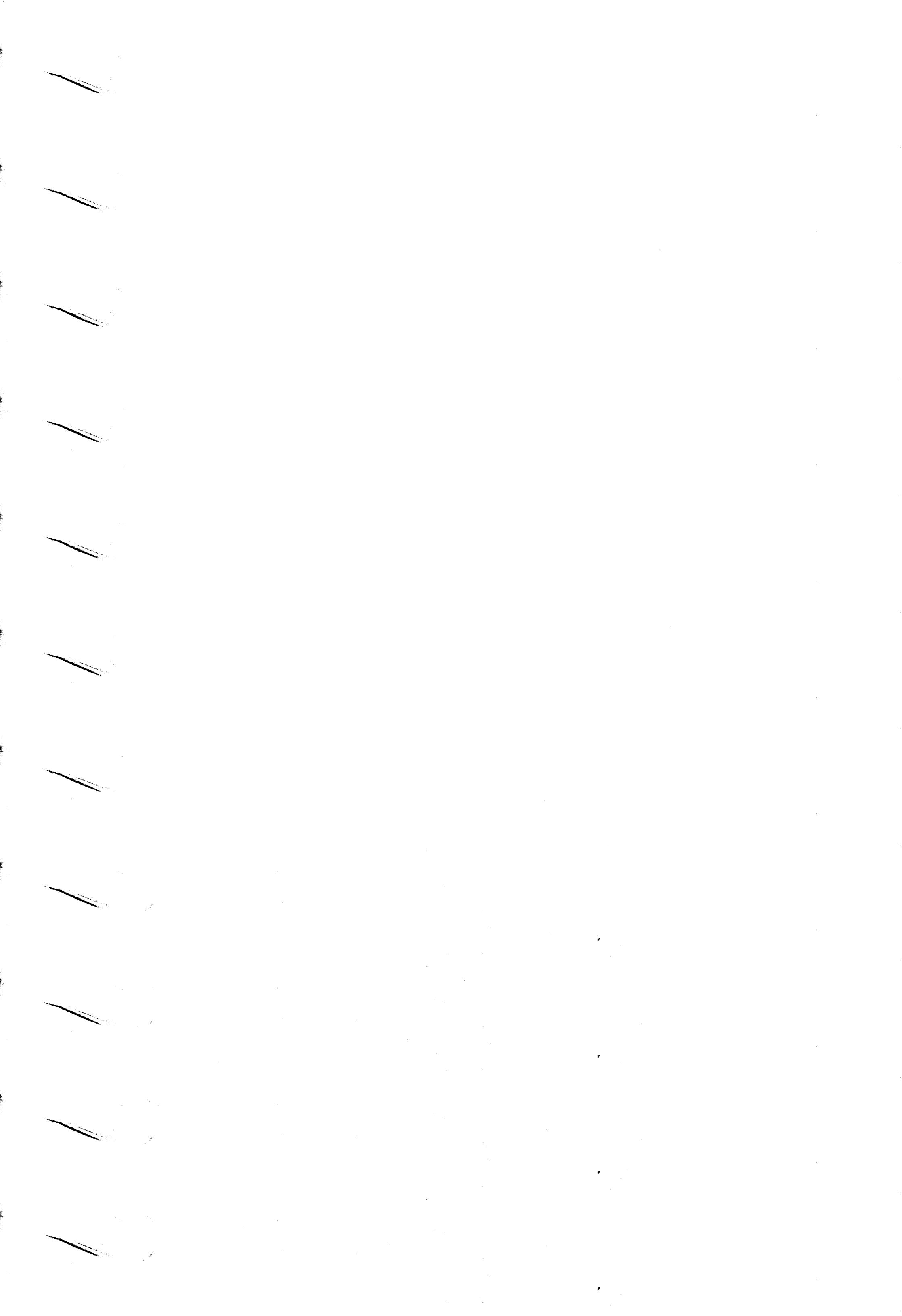
4-H is open to youth regardless of race, religion, color, gender, national origin, handicap or place of residence. Most states have programs for youth who are 5 to 19 years old. To learn more about joining 4-H, please contact your local extension office.

Lenawee, MI

37







## LENAWEE COUNTY DRAIN COMMISSIONER'S OFFICE

ROLLIN-WOODSTOCK WASTEWATER TREATMENT PLANT  
HAULED WASTE TRACKING AND DISCHARGE TICKET

<b>1) Hauling Company Information</b>	
Name: _____	
Address: _____	
City: _____	
State: _____	
Zip Code: _____	
<b>2) Origin of Waste Material</b>	
Name: _____	
Address: _____	
City, State & Zip Code: _____	
Gallons: _____	
Name: _____	
Address: _____	
City, State & Zip Code: _____	
Gallons: _____	
Name: _____	
Address: _____	
City, State & Zip Code: _____	
Gallons: _____	
<b>3) Discharge Information</b>	
I hereby certify that the waste hauled and discharged at the Rollin-Woodstock Wastewater Treatment Plant is from the above locations in the stated quantities and is "residential domestic waste" only.	
Signed: _____	Date: _____
Hauling Company Representative	
Time In: _____	
Time Out: _____	
Total Gallons: _____	

Plant Copy